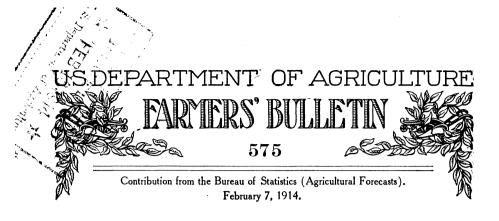
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## THE AGRICULTURAL OUTLOOK.

# LIVE STOCK OF THE UNITED STATES. INTRODUCTION.

The contents of this bulletin relate principally to estimates of the supply of live stock of specified classes on farms in the United States on January 1, 1914, the average farm price per head, and the estimated total value of each class. These estimates are based upon reports and estimates from 22 special field agents, 47 State statistical agents, 1,867 county correspondents, 15,542 township correspondents, and 1,782 special live stock correspondents. The results of these estimates have in every case been compared with the estimates by this bureau for the past three years, with the census of 1910, and with the totals shown by the records of tax assessors in the various States so far as they are available for the past three years. the totals and averages set forth herein are purely estimates, it is believed that they are as nearly accurate as it is possible to make them without an actual enumeration, such as was made by the Bureau of the Census in 1910. The statistics of farm animals and animal products are admittedly most unsatisfactory. A mass of statistics are available as to receipts and shipments of live stock at some of the great central markets of the West and Middle West, as to the number of animals exported and imported, and as to the average weights and prices quoted at central markets; but aside from the census no accurate statistics as to the number, sex, age, weight, annual increase or decrease, or cost of production, are available from year to year in the United States. Accurate statistics do not exist for the present year as to the number of local slaughtering houses in the United States, the number of meat animals slaughtered therein, cost of slaughtering, or the quantity of meat and by-products pro-

Note.—The next regular report of the Bureau of Statistics (Agricultural Forecasts) will relate to corn, wheat, oats, and barley, and will be issued at 2.15 p. m., March 7, 1914.

duced; nor are statistics to be had yearly of the cost involved in handling meat animals at the great central slaughtering and packing establishments of the West and Middle West. The best information obtainable on the numbers and values of live stock, including meat animals, is that collected decennially by the Bureau of the Census and the annual estimates of the Bureau of Statistics (Agricultural Forecasts) of the Department of Agriculture.

An analysis of the yearly estimates of numbers of live stock in former years by this bureau indicated that there was a tendency to underestimate the correct number, which became apparent when such estimates were checked against the actual enumerations made by the census. This year certain improvements and checks were used in making the estimates, which it is believed will correct this tendency to underestimate.

The estimates for January 1, 1914, indicate that there are 20,962,000 horses and 4,449,000 mules in the United States, an average annual increase of about 1.4 per cent over the number shown by the census of 1910. It is estimated that the average farm price of horses has increased from \$108.03 in the census year to \$109.32 in January, 1914, and in the case of mules from \$120.20 to \$123.85 in the same period. On this basis the total farm value of horses is \$2,291,638,000 and of mules \$551,017,000. The total estimated farm value of these animals is therefore \$2,842,655,000, which is an increase of \$194,082,000 over the census year and represents an annual increase of wealth from these sources of \$48,520,000.

The estimates indicate a slight increase in the number of milch cows since the census year, equivalent to an increase of about one-half of 1 per cent, the estimated number now being 20,737,000. On the other hand, the average farm price of milch cows has increased from \$35.29 in the census year to \$53.94 in January, 1914, or an increase of 50.7 per cent. On this basis the farm value of milch cows now in the United States is estimated at \$1,118,487,000 as compared with their estimated value in the census year of \$727,802,000, which is an increase of \$390,685,000, or an average annual increase for four years of \$97,671,000.

With regard to meat animals, that is, "other cattle," sheep, and swine, the estimates indicate a steady and fairly uniform decrease in the number of cattle and sheep, a slight increase in the number of swine, and a considerable increase in the average farm price of cattle and swine since the census year of 1910. In the case of cattle the number has decreased from 41,178,000 in the census year to 35,855,000 in January, 1914, which is an average annual decrease of 1,330,000, or about 3.3 per cent. In the case of sheep the number is estimated to have decreased from 52,448,000 in the census year to

49,719,000 in January, 1914, which is an average annual decrease of 682,000, or about 1.3 per cent. In the case of swine, the Bureau of the Census reported 58,186,000 on April 15, 1910; on January 1, 1914, it is estimated that there were 58,933,000 in the United States, which is an increase of approximately 747,000, or 1.3 per cent, for the four years.

As compared with the census year of 1910 it is estimated that the farm price of cattle other than milch cows has increased from \$19.07 to \$31.13, or 63.2 per cent, which is an average annual increase of over 15 per cent. The price of sheep has decreased from an estimated average farm value of \$4.12 in 1910 to \$4.04 in 1914; swine increased from \$9.17 to \$10.40 per head in the same period, or 13.4 per cent.

The estimated total number of these three classes of meat animals on January 1, 1914, is 144,507,000 as compared with 151,812,000 in the census year of 1910, or a decrease of 7,305,000 animals; but because of the higher prices the present farm value of these animals is estimated at \$1,930,087,000 as compared with \$1,534,600,000 in the census year, or an increase in valuation of \$395,487,000.

## NUMBER AND VALUE OF FARM ANIMALS COMPARED WITH POPULATION.

The report of the last census shows a total population in 1910 of 91,972,000, and estimates an annual increase subsequent to 1910 that would make the population in 1914 equal to 98,646,000. This would indicate that the per capita number of farm animals has decreased since 1910. Relatively to the population there is an accumulated shortage in the four years of 3.5 per cent in the number of horses and 9.8 in the number of mules, or approximately 740,000 horses and 483,000 mules. In the case of milch cows the accumulated shortage amounts to 965,000, or about 4.4 per cent; that is, in order to have the same number of milch cows for every 100 inhabitants in January, 1914, as there were in the last census year would require a total of 21,702,000, which is 965,000 more than the returns from the various correspondents throughout the United States indicate.

With regard to meat animals, our estimates indicate an accumulated shortage since the census year of approximately 19.2 per cent, or 8,536,000 head, of cattle; 11.6 per cent, or 6,509,000 head, of sheep; and 5.2 per cent, or 3,214,000 head, of swine. The indicated total shortage of meat animals since the census of 1910 is therefore approximately 18,259,000 head, or nearly nine beef cattle, seven sheep, and over three hogs for each 100 of the total estimated population in January, 1914. Notwithstanding this tremendous shortage in the number of meat animals in the past four years, a shortage of over 7,000,000 animals, the estimated farm value of the cattle, sheep, and swine, on farms on January 1 was \$395,487,000 greater than the estimated value of these animals in the census year of 1910.

## SOME CAUSES OF THE SHORTAGE OF MEAT ANIMALS AND INCREASE IN THEIR VALUE.

The shortage of meat animals is probably due to a number of contributing causes, such as the encroachment of farms upon the range territory; absence of a proper range-leasing law permitting economical management and utilization of ranges; the shortage in the corn and forage crop due to the severe drought in Kansas, Nebraska, and Oklahoma in 1913, which caused the farmers in those States to dispose of their meat animals; the increase in the value of land and the increased cost of labor and stock feed, resulting in greatly increasing the cost of production; the decline in stock raising on farms in the East and South because of poor marketing facilities resulting from many local slaughtering establishments having been driven out of business by the competition of the great central slaughtering establishments of the West and Central West; the temptation to sell live stock at the prevailing high prices rather than to continue to carry them with high-priced stock feed, possible loss from disease or accident, and uncertain prices the following year; increased tendency to operate farms under short-term leases, with no incentive to maintain soil fertility through stock raising; possession of leased farms changed at wrong season of year for handling stock economically; enormous losses from cholera in swine; and the competition of higher prices for other farm products. These are some of the causes which are mentioned to account for the apparent shortage in meat animals; but the extent of their influence, singly or combined, is not definitely known. They will undoubtedly be considered by the committee which was recently appointed by the Secretary of Agriculture to investigate the economics of the present meat situation, of which Dr. B. T. Galloway, Assistant Secretary of Agriculture, is chairman, and Dr. H. J. Waters, president Kansas Agricultural College; Prof. C. F. Curtiss, director Iowa Agricultural College; H. W. Mumford, professor animal husbandry, Urbana, Ill.; Dr. A. Melvin, chief Bureau of Animal Industry; and Dr. T. N. Carver, director Rural Organization Service, are members.

The large increase in the value of meat animals on farms is probably accounted for by the increased cost of production and the increased consumption or demand arising from the fact that production has not kept pace with the increase in population, and in the case of cattle and sheep has actually declined. This unprecedented increase in the average value of meat animals does not necessarily mean that farmers or stock raisers are making more, if any, profit. On the contrary, the cost of production has probably increased more rapidly than the increase in the selling price of live stock. It is well known that producers of farm products are the last to receive any benefit from higher prices paid by consumers, yet they are prompt to increase

production if there is a prospect of realizing better returns. The very fact that there is a present shortage of nearly 19,000,000 meat animals in the United States since the census of 1910 indicates clearly that the business is not profitable to producers; otherwise every farmer and stock raiser in the country would have increased his herds of meat animals.

It should also be borne in mind that the estimated average value of meat animals shown in this bulletin is their value on the farm, and not the wholesale or retail value. The farm value, or average price received on farms, is much less than the wholesale prices, which in turn are considerably less than the retail prices to consumers. what the difference is between the price at the farm and the cost to the ultimate consumer is not definitely known, partly because the animals sold from the farm lose their identity in the process of manufacture into meat which is purchased by the consumer. cost to the consumer is made up of the cost of production of the live stock (farm price), the cost of marketing and transportation of the live animals, the cost of manufacture into various kinds of meats, and the cost of marketing and distributing the manufactured products to the consumer. This is an immense business in itself and the indications are that the profits are correspondingly large to every one concerned, between the original producer and the ultimate consumer.

LEON M. ESTABROOK,

Chief, Bureau of Statistics (Agricultural Forecasts).

## ESTIMATES OF FARM ANIMALS.

## CATTLE OTHER THAN MILCH COWS.

NUMBER.

The estimated munber of cattle on farms other than milch cows January 1, 1914 was 35,855,000. The number enumerated in the census of 1910 for April 15 was 41,178,000, from which number there was an unbroken decline year by year to 1914. The decline from the census number is 12.9 per cent, and from the number for 1913, 0.5 of 1 per cent.

VALUE.

In estimated average farm value per head, cattle other than milch cows have made an enormous gain since 1910. The average for January 1, 1914, is \$31.13, all ages being included in this average. The average for January 1, 1910, as established by this bureau, was \$19.07; for the same month 1912 it was \$21.20; and for 1913, \$26.36. The increase for 1914 is \$4.77, or 18.1 per cent, over the average price for 1913, and \$12.06, or 63.2 per cent, over the average price for the census year 1910.

In consequence of the extraordinary increase in the farm value per head of cattle other than milch cows, the total value of this class of animals has increased in a large degree from 1910 in spite of a diminished number. The total value of this class of animals for 1910, established by multiplying the number of animals as determined by the census by the average value per head as determined by this bureau, was \$785,261,000; the total value for January 1, 1912, as established entirely by this bureau, was \$790,064,000; for 1913, the total estimated value was \$949,645,000, a gain of 20.9 per cent over 1910; and the value for January 1, 1914, is \$1,116,333,000, a gain of 42.2 per cent over 1910, of 41.3 per cent over 1912, and of 17.6 per cent over 1913.

A tabular statement of the number of cattle on farms other than milch cows and their value per head and total value, with details for the States, may be found in Table 12.

#### CAUSES OF DIMINUTION OF NUMBER.

The diminution of cattle other than milch cows on the farms of the United States in 1914 as compared with 1913 was caused mainly by the high prices of feed, the drought of the summer of 1913 extending from New England westward to the Rocky Mountains, and by the high prices at which the cattle of this class, bad as well as good, could be sold. West of the Missouri River so deficient were the corn crop and summer forage that a large portion of the cattle were hurriedly and permaturely sold at prices much lower than farmers paid for cattle in the following autumn when they began to restock their pastures. The price of corn rose so high in the autumn of 1913 as to make the profitable feeding of cattle for beef unpromising. parts of the drought area, bankers who had advanced money to farmers for feeding beef cattle were afraid that feeding would be unprofitable and forced farmers to sell prematurely. In March, 1913. a blizzard killed many thousands of cattle in Nebraska. In the Gulf States from Florida to Louisiana, in the autumn of 1913, buvers from Texas and parts of the region to the north bought all of the cows that they could obtain, even scrubs, for stocking and restocking pastures on farms and ranges, for breeding purposes. In a part of Mississippi the poor cotton crop compelled farmers to sell cows to pay debts.

For several years the number of cattle other than milch cows had decreased in Texas, until the droughts of recent years stopped the sale of cattle ranges in the western portion of the State for use as farms, which had been the main cause of the former reduction in number of cattle. The increase of cattle in 1914 was caused by importations from Mexico since the new tariff act went into effect October 4, 1913, permitting the entry of cattle duty free. While it

is true that a large fraction of the cattle imported from Mexico goes directly to the slaughterhouses, it is also true that considerable numbers of them have been sent to pastures in the western portion of Texas, where the grazing, because of abundant rains, has for several months been as fine as was ever known. In other parts of the State some of these cattle are pastured on winter wheat and oats.

In California the day of stock cattle is rapidly passing. The ranges are becoming smaller, and the number of range cattle becomes less every year.

The cattle on farms, other than milch cows, are now about three times their number in 1850. The census of that year reported 11,394,000. The number increased to 17,034,000 in 1860, but the losses of the Civil War had not been replaced by 1870, in which year the census disclosed a decline to 14,885,000. Then followed the great extension of settlement on new public and railroad lands west of the Mississippi River, north and south, and this caused an enormous expansion of the raising of cattle for beef. By 1890 the number of these cattle had increased to 34,852,000, and the culmination of the increase was reached at about the time when the census of 1900 was taken, when the number of these cattle was 50,584,000.

Then followed the exhaustion of the supply of public and railroad lands for grazing purposes, the encroachment of settlers upon the ranges, the "no-fence law," the practice of dry farming, and the upward movement of the general price level in which farm animals, products, and land moved upward in price in greater degree than most other products and property did. The upward movement of prices, especially of corn and land, greatly increased the cost of making beef; and, although farmers received high prices for beef cattle, these prices often brought little or no profit.

Farmers have never regarded themselves as having a mission to supply the public with beef at a low price. They have naturally treated this industry purely from an economic viewpoint and whenever they have found that they could make more profit or prevent loss by premature selling of cattle, or by selling some of their production stock, or by selling calves, they have done so. The raising of beef cattle on old-time ranges, on cheap pastures, and on low-priced corn has ceased, and well-informed men perceive that the raising of beef cattle must be established largely on new foundations.

From the highest point reached in number of cattle on farms other than milch cows about 1900, when the number was over 50,000,000, the number declined to 41,178,000 in 1910, and to 35,855,000 in 1914.

## COMPARISON WITH POPULATION.

It will help to understand the import of these numbers if they are compared with the population of the years mentioned. The animals

under consideration are cattle on farms other than milch cows. There was 0.49 of 1 animal per capita of the population in 1850, and 0.54 of 1 animal in 1860. This average was not surpassed until 1890, when the per capita ratio was 0.55 of 1 animal. The highest point reached, as far as is known, is 0.67 of 1 animal per capita of the population in 1900, from which time the ratio declined rapidly and strikingly to 0.45 of 1 animal per capita in 1910, and 0.36 of 1 animal in 1914, or but little more than half as much as the ratio of 1900. The figures may be found in Table 1.

Table 1.—Number and per capita number of horses, mules, cattle, sheep, and swine on farms, according to the census June 1, 1840 to 1900, and April 15, 1910, and Department of Agriculture estimates, January 1, 1914.

## NUMBER OF ANIMALS.

				Cattle.		Sheep (not	
Year.	Horses.	Mules.	Total cattle.	Mileh (dairy) cows.	Other cattle.	spring lambs 1840 to 1890).	Swine.
1840 1850 1860 1870 1870 1880 1890 1900 1910 1914	1 4, 335, 669 4, 336, 719 6, 249, 174 7, 145, 370 10, 357, 488 14, 969, 467 18, 267, 020 19, 833, 113 20, 962, 000	(2) 559, 331 1, 151, 148 1, 125, 415 1, 812, 808 2, 295, 532 3, 264, 615 4, 209, 769 4, 449, 000	14,971,586 17,778,907 25,620,019 23,820,608 35,925,511 51,363,572 67,719,410 61,803,866 56,592,000	(3) 6, 385, 094 8, 585, 735 8, 935, 332 12, 443, 120 16, 511, 950 17, 135, 633 20, 625, 432 20, 737, 000	(3) 11, 393, 813 17, 034, 284 14, 885, 276 23, 482, 391 34, 851, 622 50, 583, 777 41, 178, 434 35, 855, 000	19,311,374 21,723,220 22,471,275 28,477,951 35,192,074 35,935,364 61,503,713 52,447,861 49,719,000	26, 301, 293 30, 354, 213 33, 512, 867 25, 134, 569 47, 681, 700 57, 409, 583 62, 868, 041 58, 185, 676 58, 933, 000

#### PER CAPITA NUMBER OF ANIMALS.

						1	ĺ
1840	10.25	(2)	0.88	(3)	(3)	1.13	1.54
1850	.19	0.02	. 77	0.28	0.49	.94	1.31
1860	. 20	. 04	. 81	. 27	. 54	. 71	1.07
1870	. 19	. 03	. 62	. 23	. 39	. 74	. 65
1880	. 21	. 04	. 72	. 25	. 47	. 70	. 95
1000							
1890	. 24	. 04	. 82	. 26	. 55	. 57	. 91
1900	. 24	. 04	. 89	. 23	. 67	. 81	.83
1910	. 22	. 05	. 67	. 22	. 45	. 57	. 63
1914	. 21	. 05	. 57	. 21	. 36	. 50	.60
			!				

<sup>1</sup> Including mules.

## GEOGRAPHIC REDISTRIBUTION.

The westward movement of the industry of raising beef cattle gave predominance to the South Central States west of the Mississippi River as the leading geographic division in this industry as early as 1860, and this relative position was not lost until 1880, when it passed to the North Central States west of the Mississippi River, which, as a group, still hold the leading place in this industry among the nine geographic divisions into which the United States is now commonly divided by the Bureau of the Census and by the Department of Agriculture.

From 1850 to 1910 the fraction of the Nation's cattle on farms other than milch cows possessed by New England continuously declined

<sup>2</sup> Included with "Horses,"

<sup>3</sup> Not given separately.

from 7.6 to 1.2 per cent, but slight evidence of recovery appears in 1914, when New England's fraction appears to be 1.4 per cent.

In the Middle Atlantic States the relative position of cattle on farms other than milch cows, in comparison with other geographic divisions, is nearly the same as in New England, except that the Middle Atlantic States have always had a larger number of animals than New England. In 1850 the Middle Atlantic States had 14.6 per cent of the Nation's cattle on farms other than milch cows, and the fraction declined to 4.0 per cent in 1910, followed by a perceptible increase to 4.4 per cent in 1914.

The fractions are of similar import for the South Atlantic States, which had 25.7 per cent of these cattle in 1850, followed by a decline to 6.0 per cent in 1900, after which there was a gain to 8.1 per cent in 1914. This group of States had more of these cattle than any other in 1850.

In the North Central States east of the Mississippi River these cattle were 18.9 per cent of the national total in 1850, and the fraction increased to 21.3 per cent in 1870, after which the decline was steady to 12.1 per cent in 1910. A perceptible tendency toward recovery is indicated for 1914, for which year the percentage is 12.8.

The South Central States east of the Mississippi River had a larger percentage of the Nation's total cattle on farms and ranges other than milch cows in 1850 than they have since possessed. Their percentage for 1850 was 17.8, from which there was a steady decline to 4.8 per cent in 1900, followed by a rise to 5.6 per cent for both 1910 and 1914.

The year 1850 practically antedated the settlement of the Mountain States by white people, and at that time the farm and range cattle other than milch cows were only 0.3 of 1 per cent of the national total. After 1870 the fraction increased rapidly to 11.0 per cent in 1900 and continued to increase in 1910 and 1914, being for the latter year 14.1 per cent.

The Pacific States have remained in nearly a stationary position relatively during the last 50 years. Their fraction of the national total of these cattle in 1850 was 2.5 per cent. It rose quickly to 6.4 per cent in 1860, from which figure it fell to 3.8 per cent in 1870. Subsequently the increase has been slow and has reached the fraction of 5.8 per cent in 1914, somewhat less than that of 1860.

At the present time the North Central States west of the Mississippi River possess 27.7 per cent of the farm and range cattle other than milch cows and the South Central States west of the Mississippi River 20.1 per cent. The States next in order are the Mountain States with 14.1 per cent, slightly below which is the fraction of 12.8 per cent for the North Central States east of the Mississippi River, 8.1 per cent for the South Atlantic States, 5.8 per cent for the Pacific

States, 5.6 per cent for the South Central States east of the Mississippi River, 4.4 per cent for the Middle Atlantic States, and 1.4 per cent for New England.

The Atlantic States, altogether, possess 13.9 per cent of the national total; the Central States east of the Mississippi River possess 18.4 per cent, the Mountain and Pacific States possess 19.9 per cent, and the Central States west of the Mississippi River possess 47.8 per cent, or nearly half of the entire number.

The estimates of the number of these animals in the nine geographic divisions for 1914 indicate that a redistribution of relative numbers has begun geographically. All geographic divisions east of the Mississippi River have begun to increase their fraction of the national total except the South Central States east of the Mississippi River, where the fraction appears to be stationary since 1910. The Mountain States are increasing their fraction, and the Pacific States are apparently holding a stationary position relatively. The prominent beef-cattle producing region for many years, between the Mississippi River and the Rocky Mountains, has begun to lose its relative standing in favor of less prominent geographic groups of States. These changes in relative standing, however, are due to beef-cattle reductions in the great cattle region above mentioned more than to gains in beef cattle elsewhere.

An analysis of the relative distribution of the farm and range cattle, not including milch cows, throughout the geographic divisions of the country may be found in Table 2.

Table 2.—Percentage of live stock in each geographic division of the United States.

MILCH COWS.

Year.	New England.	Middle Atlantic.	South Atlantic.	East North Central.	West North Central.	East South Central.	West South Central.	Moun- tain.	Pacific,
1840 <sup>1</sup>	9. 5 7. 9 7. 2 6. 0 5. 0 5. 2 4. 1	24.8 22.6 24.5 19.6 15.3 15.2 12.6 12.3	19. 5 14. 4 11. 2 10. 3 8. 3 8. 1 8. 8 8. 7	20. 2 22. 7 25. 2 24. 0 22. 7 23. 1 23. 4 23. 6	4. 3 7. 1 11. 7 19. 4 27. 2 26. 4 25. 8 25. 7	14. 7 11. 1 9. 3 9. 2 8. 0 7. 4 7. 9 7. 4	6. 5 10. 5 7. 4 8. 1 9. 2 9. 6 10. 9 10. 6	0.3 .6 .9 1.0 1.3 1.9 2.5 3.1	0.2 3.1 2.6 2.4 3.0 3.1 4.0 4.6
			ОТЕ	IER CAT	TLE.				
1840 <sup>2</sup>	5.3 4.8 3.2 1.7	22. 1 14. 6 10. 0 9. 4 7. 9 4. 4 4. 2 4. 0 4. 4	23. 4 25. 7 15. 9 13. 0 11. 0 7. 2 6. 0 7. 3 8. 1	17. 9 18. 9 19. 6 21. 3 19. 8 15. 2 13. 0 12. 1 12. 8	3. 1 5. 7 7. 9 12. 7 22. 5 31. 7 30. 8 29. 9 27. 7	19. 4 17. 8 12. 6 10. 1 8. 3 7. 2 4. 8 5. 6 5. 6	3. 8 6. 9 21. 8 23. 7 18. 1 18. 3 24. 8 20. 6 20. 1	0.3 .5 1.2 5.3 9.6 11.0 13.5 14.1	2.5 6.4 3.8 3.9 4.7 4.0 5.8 5.8

<sup>&</sup>lt;sup>1</sup> Not separately stated.

<sup>&</sup>lt;sup>2</sup> Total cattle.

Table 2.—Percentage of live stock in each geographic division of the United States—Continued.

SWINE.

Year,	New England.	Middle Atlantic.	South Atlantic.	East North Central.	West North Central.	East South Central.	West South Central.	Moun- tain,	Pacific.
1840. 1850. 1860. 1870. 1880. 1890. 1900. 1914.	1.0 0.8 0.7	13. 9 7. 6 6. 5 6. 1 4. 5 4. 1 3. 1 3. 1 3. 5	25. 0 24. 7 21. 5 15. 3 11. 9 8. 9 8. 8 10. 2 11. 2	21. 2 21. 5 25. 5 28. 8 28. 5 26. 1 25. 5 24. 9 25. 7	5. 2 6. 7 10. 6 16. 2 29. 5 39. 4 38. 9 36. 6 33. 4	29. 1 31. 2 23. 7 20. 7 14. 2 11. 4 10. 6 9. 3 9. 9	2. 7 7. 0 9. 5 9. 5 8. 7 7. 6 10. 2 12. 1 11. 7	0. 0 0. 1 0. 1 0. 2 0. 3 0. 6 1. 1 1. 5	0.1 1.6 2.3 1.1 1.2 2.6 2.6
				SHEEP					
1840. 1850. 1860. 1870. 1880. 1890. 1910. 1914.	5. 1 3. 9 2. 6 1. 4	36. 8 25. 0 19. 5 14. 4 10. 3 8. 9 5. 0 3. 2 3. 5	13. 6 13. 7 11. 3 7. 4 7. 2 6. 8 4. 3 3. 9 4. 5	16. 6 31. 4 30. 7 39. 2 30. 0 26. 3 17. 3 16. 5	1.9 4.2 5.5 8.7 8.1 8.0 7.9 8.9	10.6 11.9 10.8 7.8 6.6 6.4 3.7 3.8 4.6	0. 7 1. 4 5. 1 3. 5 7. 9 10. 9 4. 6 4. 2 4. 9	1.8 3.9 2.9 10.3 17.5 45.1 49.2 43.3	0. 2 5. 3 11. 0 15. 7 12. 6 10. 7 9. 8

#### COMMERCIAL MARKETINGS.

The commercial marketings of cattle remain to be considered. The receipts of cattle, including dairy cows but not including calves, have been aggregated for Chicago, Kansas City, Omaha, St. Louis, Sioux City, St. Joseph, and St. Paul, for each year from 1900 to 1913. The cattle received in these seven great markets in the calendar year 1900 numberd 7,179,000, and the number steadily increased to its highest point, 9,591,000, in 1907. In the three years following 1907 the marketings of cattle averaged more than 9,000,000, but in 1911 the decline became sharp, and in 1913 the marketings had the total of only 7,905,000 cattle.

If the high average marketings of the 10 years 1901–1910 are regarded as 100, the marketings for 1907 reached the high point of 107.6, from which, with fluctuations, the relative number declined to 88.7. The marketings for 1900 and 1901 were lower than this.

The marketings of beef cattle, as above mentioned, are to be understood in the light of the attendant circumstances. From 1900 to the present time there has been, more or less, a marketing of breeding stock of beef cattle as well as of steers, calves, and aged cows. For the marketing of calves a separate statement can be made for five of the great markets above mentioned. In 1902, 518,000 calves were received at these markets, and the number increased to 981,000, or nearly double, in 1910, and subsequently sharply declined to 741,000 in 1913. From 1905 to the last year the marketing of calves has largely represented the sale of production stock.

For the results of the compilations of the marketings of cattle and calves, see Table 3.

Table 3.— Yearly marketings of live stock.

[Combined receipts at Chicago, Kansas City, Omaha, St. Louis, Sioux City, St. Joseph, and St. Paul.]

Year.		Index (100=yearly average, 1901-1910).						
	Cattle.	Calves.1	Hogs.	Sheep.	Cattle.	Calves.1	Hogs.	Sheep.
1900 1901 1902 1902 1903 1904	7,179,344 7,708,839 8,375,408 8,878,789 8,690,699	2 304, 310 2 356, 952 517, 702 550, 559 513, 034	18,573,177 20,339,864 17,289,427 16,780,250 17,778,827	7,061,466 7,798,359 9,177,050 9,680,692 9,604,812	80. 6 86. 5 94. 0 99. 6 97. 5	2 43. 4 2 51. 0 73. 9 78. 6 73. 2	. 100. 4 110. 0 93. 5 90. 7 96. 1	70. 6 77. 9 91. 7 96. 7
1905 1906. 1907. 1908. 1909.	9, 202, 083 9, 373, 825 9, 590, 710 8, 827, 360 9, 189, 312	730, 639 796, 793 834, 781 854, 687 868, 564	18, 988, 933 18, 682, 370 19, 029, 775 22, 334, 445 18, 420, 012	10, 572, 259 10, 864, 327 9, 857, 877 9, 833, 640 10, 284, 858	103.3 105.2 107.6 99.1 103.1	104. 3 113. 7 119. 2 122. 0 124. 0	102. 6 101. 0 102. 9 120. 7 99. 6	105. 6 108. 6 98. 5 98. 3 102. 8
1910	9, 265, 408 8, 768, 456 8, 159, 888 7, 904, 552	981,309 975,176 909,526 740,662	15, 347, 791 20, 453, 530 20, 265, 667 19, 924, 331	12, 407, 418 13, 556, 107 13, 755, 579 14, 037, 830	104. 0 98. 4 91. 6 88. 7	140. 1 139. 2 129. 8 105. 7	83.0 $110.6$ $109.5$ $107.7$	124. 0 135. 5 137. 4 140. 3

<sup>&</sup>lt;sup>1</sup>Receipts at Chicago, Kansas City, St. Joseph, St. Paul, and Sioux City. No returns for Omaha and St. Louis.

2 No data for Sioux City.

#### MILCH (DAIRY) COWS.

#### NUMBER.

According to the estimate of this bureau, the number of milch cows on farms January 1, 1914, was 20,737,000. This is a slight increase, 0.5 of 1 per cent, over the number as enumerated in the census of 1910, and is 1.2 per cent above the estimate of this bureau for 1913.

Various causes contributed during 1913 to prevent a larger increase in the number of milch cows on farms than is indicated. England and westward across the principal dairying States, the work of cow-testing associations has resulted in eliminating many cows that were kept at a loss and these cows were slaughtered. Along the Gulf States from Florida to Louisiana many cows were bought for transportation to pastures in Texas and States to the north to take the place to some extent of cows sold during the severe drought of the summer, because of shortage of pasture and forage. The high prices paid by slaughterers for beef animals of any description, bad as well as good, induced the sale of many dairy cows, for the reason that the prices offered were often much beyond the values of these cows for dairy purposes. The more exacting requirements of city health officers, which have the effect of increasing the cost of producing milk, have also operated to reduce the number of cows on The short supply of feeding stuffs in some sections on account of the prolonged drought, the low production of corn and its high

price, and the high prices of feeding stuffs counted against the profitableness of dairying and consequently the milch cows were sold.

On the other hand, causes were in operation to increase the number of dairy cows. Farmers are more inclined to improve their systems of farming than before, and the dependence of the fertility of the soil upon a system of which dairying is a part has caused many farmers to begin or to resume dairying or to enlarge their herds.

The most marked increase in dairying is found in Wisconsin, Minnesota, North Dakota, and South Dakota, where dairying has been extended into new areas.

## VALUE.

A most remarkable increase in the value of milch cows per head has occurred since 1910. The average of that year, as ascertained by this bureau, was \$35.29; for 1913 it was \$45.02; and for 1914, \$53.94, an increase of 19.8 per cent over 1913 and of 52.8 per cent over 1910.

The present price is partly the result of a demand that has increased faster than the supply. It is also largely due to the fact that the quality of dairy cows has improved through the weeding out of the unprofitable ones and it is very considerably the result of the greater prevalence of improved breeds.

As the preceding figures indicate, the total value of the milch cows of the United States has increased enormously since the census year 1910. Their total value in that year, as computed by multiplying the census number of animals by the average value per head as determined by this bureau, was \$727,802,000. The total value, as determined by this bureau for 1913, was \$922,783,000, and the amount for 1914 is \$1,118,487,000.

The details concerning the number of dairy cows in 1914, 1913, and 1910 and average value per head and total values for the same years may be found for the various States in Table 13.

#### PER CAPITA RATIOS.

Dairy cows relative to population were more common than they are now as far back as the first census for them in 1850. At the present time there is 0.21 of 1 dairy cow per capita of the population. In 1910 the ratio was 0.22 of 1 cow and the percentage increased backwards to 1890, when the ratio was 0.26 of 1 dairy cow. Back of that year there was a decline to 0.23 of 1 dairy cow in 1870, preceding which there was an increase to 0.28 of 1 dairy cow per capita of the population in 1850.

It may not be inferred from the trend of the foregoing averages that the quantity of butter fat produced by dairy cows per capita of the population has decreased in the same degrees indicated by the averages for the census years, nor indeed that it has decreased at all. The improvement in both the average quantity and the quality of the milk since 1850 has very likely been sufficient to counteract the diminishing per capita ratios of dairy cows to population.

Details concerning the per capita number of milch cows may be found in Table 1.

## GEOGRAPHIC REDISTRIBUTION.

The geographic redistribution of the nation's milch cows as time has advanced is of much interest. At the present time the North Central States west of the Mississippi River contain 25.7 per cent of the entire number of milch cows on the farms of this country and no other division of States has as large a fraction. Next below is the North Central States east of the Mississippi River with 23.6 per cent. Following this is the percentage for the Middle Atlantic States, 12.3, after which follow in order 10.6 per cent for the South Central States west of the Mississippi River, 8.7 per cent for the South Atlantic States, 7.4 per cent for the South Central States east of the Mississippi River, 4.6 per cent for the Pacific States, 4 per cent for New England, and 3.1 per cent for the Mountain States.

New England has steadily lost in the fraction of the nation's milch cows possessed in that region since 1850 and so have the Middle Atlantic and East South Central States; but the South Atlantic States had a diminishing percentage until 1900, after which there was an increase to 8.8 per cent in 1910, followed by the trace of a decline in 1914.

The East North Central States in 1850 had about one-fifth of the milch cows of the United States and the Middle Atlantic States more than one-fourth, but the East North Central States took the lead in 1860 and kept it until 1880, when the leading place was taken by the West North Central States. From 1850 to the present time the East North Central States have held either first or second place in the possession of number of milch cows, in comparison with other geographic divisions.

The West North Central States had but 4.3 per cent of the milch cows on farms in 1850 and the percentage rapidly increased to 27.2 in 1890, from which it declined to 25.7 per cent in 1914.

The West South Central States now have about the same fraction of the nation's dairy cows on farms that they had in 1860, which was slightly more than 10 per cent. The lowest fraction for an intermediate census year was 7.4 per cent in 1870. The Mountain States have slightly increased their fraction of the nation's dairy cows on farms from 1850 to the present time; but the Pacific States had the same fraction in 1900 that they had in 1860, 3.1 per cent; but since 1900 the fraction has increased to 4.6 per cent at the present time.

#### BUTTER.

Under the new tariff of October 4, 1913, all cattle may be imported free of duty. Previous to that time dairy cows were subject to a duty of 27.5 per cent ad valorem. The new tariff reduces the duty on butter from 6 to 2 cents per pound. Substantially no dairy cows are imported into the United States, except so far as pure-bred cows imported for breeding purposes may be regarded as dairy cows.

The high price of butter during the autumn of 1913 and the present winter and the reduction of the duty have made an opening for the increased importation of butter. These importations have come from New Zealand, Australia, Siberia, and Canada. In the fiscal year ending June 30, 1912, 1,025,668 pounds of butter were imported; in the fiscal year 1913, 1,162,253 pounds of butter; and during the five months, July to November, 1913, 1,984,891 pounds were imported. This looks like a small quantity compared with the production of 1,700,000,000 pounds of butter in this country in 1909 as ascertained by the census.

Much of the butter imported last autumn was of low grade, and more or less of this was reworked, or at any rate repacked, and sold as domestic butter, according to commercial reports.

#### SHEEP.

## NUMBER.

A very considerable decline in the number of sheep has taken place since 1910. In that year the number on farms as ascertained by the census was 52,448,000; the estimate for January 1, 1914, is 49,719,000, a decline of 3.4 per cent from 1913 and of 5.2 per cent from 1910.

Among the causes that have contributed to the diminution of number of sheep is the scarcity of labor required for their care, the high prices of sheep and lambs for slaughter, the displacement of sheep by expanding dairying, deficient pasturage and forage on account of drought, destruction by dogs, the settlement of range land previously occupied by sheep, and the low price of wool; also the increasing value of land.

According to the reports of correspondents the low price of wool is the most prominent cause. In view of the general agreement of correspondents with regard to this, the accompanying Table 4 has been prepared to show the range of wholesale prices of wool per pound in the Boston market from 1899 to December, 1913. The highest prices for Ohio fine unwashed wool since 1899 ranged from 23 to 30 cents from 1905 to 1909; for 1913 the range was 20 to 24 cents. Similar declines are observable in the cases of the other wools included in the table.

During 1913 the price of Ohio fine unwashed wool declined from 24 cents in January to 20–21 cents in December; of Ohio XX washed from 32 cents in January to  $25\frac{1}{2}$ –26 cents in December; for Ohio Delaine washed from 34 cents in January to 26–27 cents in December; for selected Territory staple scoured, from 66–67 cents in January to 51–53 cents in December; for fine medium Territory clothing scoured, from 57–59 cents in January to 46–48 cents in December; and for fine free fall Texas scoured, from 47–50 cents in January to 41–43 cents in December.

Table 4.—Range of wholesale prices of wool per pound in Boston, 1899-1913.

Date.	Ohio unwa	fine, shed.	Ohio was	XX,	Dela	nio aine, hed.	Terri sta	elected itory, ple ired.	Terri clot	edium tory, hing red.	Fine fall, a scou	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
1899 1900 1901 1901 1902 1903	Cts. 16 18 16½ 19 20	Cts. 26 26 19½ 23 25	$Cts.$ $25\frac{1}{2}$ $27$ $26$ $27$ $30$	Cts. 38 38 28 28 32 35	Cts. 27 27 27 27 27 28 33 31	Cts. 40 40 30 35 37	Cts. 42 49 43 48 52	Cts. 75 74 50 59 60	Cts. 38 45 35 42 50	Cts. 62 62 44 50 58	Cts. 30 40 36 38 44	Cts. 52 55 42 48 48
1904 1905 1906 1907 1908	21 23 24 25 19	25 30 28 28 27	32 34 33 <del>1</del> 33 30	36 37 36 35 35	34 36 35½ 36 31	38 40 37½ 39 39	50 65 70 70 53	70 78 78 78 75 72	50 60 65 66 43	68 72 70 73 62	44 54 58 50 42	56 63 63 62 53
1909	$23 \\ 20 \\ 18 \\ 21$	28 28 22 25	34 30 27 28	38 38 32 33	37 34 29 30	42 40 34 35	62 60 53 60	80 80 62 67	60 54 51 48	72 68 60 59	45 48 41 42	62 62 50 48
1913.  January. February. March. April	24 24 23 21	24 24 24 24 23½	32 32 29 27	32 32 32 32 29	34 33 30 29	34 34 34 31	66 63 57 55	67 65 65 60	57 57 54 51	59 58 58 55	47 49 47 45	50 50 50 48
May	$\begin{array}{c} 20 \\ 20 \\ 20 \\ 20 \end{array}$	21 21 21 21	27 27 27 26	28 27 30 30	27 27 27 27 27	30 28 28 28 28	55 55 55 54	56 56 56 55	49 49 49 49	53 50 50 50	45 45 45 45	46 46 46 46
September October November December.	20 20 20 20	21 21 21 21 21	$25$ $25\frac{1}{2}$ $25\frac{1}{2}$	26 26 26 26	27 27 26½ 26	28 28 28 27	53 53 53 51	55 54 54 53	48 46 46 46	50 50 48 48	45 43 41 41	46 46 45 43
The year.	20	24	25	32	26	34	51	67	46	59	41	50

VALUE.

In spite of the decline in the number of sheep, their value per head has increased 10 cents within a year and was \$4.04 January 1, 1914. This, however, is a decline of 1.9 per cent from the price of January 1, 1910.

The total value of all sheep on farms January 1, 1914, was \$200,803,-000, a decline of 1 per cent from 1913 because of the decline in the number of sheep, and a decline of 7 per cent from the total for 1910 because of a decline in both number of sheep and value per head.

Details for number and value of sheep in the various States may be found in Table 14.

Since 1900 sheep keeping has been declining in this country to a very marked degree. The number of sheep in that year was 61,500,000, while the present number is 19.2 per cent less, with a prospect of further diminution unless sheep are to be raised primarily for meat with wool as a by-product.

## PER CAPITA OF THE POPULATION.

The number of sheep in this country per capita of the population was 1.13 according to the census of 1840. The number diminished to 0.57 of 1 sheep in 1890. During this period the census excluded spring lambs from enumeration. These were included in 1900 and subsequently. In 1900 the ratio per capita of population was 0.81 of 1 sheep and the ratio declined to 0.50 of 1 sheep in 1914. Details of figures may be found in Table 1.

#### GEOGRAPHIC CHANGES.

The most striking geographic redistribution of a class of farm animals from the earliest census to the present time is perhaps afforded by sheep. In 1840 the Middle Atlantic States had 36.8 per cent of all sheep on farms and New England was second with 19.8 per cent. The third place was held by the east North Central States with 16.6 per cent, while next in order were the South Atlantic States with 13.6 per cent, the east South Central States with 10.6 per cent; the west North Central States with 1.9 per cent, the west South Central States with 0.7 of 1 per cent, and no sheep at all, as far as the census ascertained, in the Mountain and Pacific States.

Now New England and New York occupy the lowest and next to the lowest place, respectively, in the possession of sheep on farms, and a little less than 5 per cent of the national total is possessed by each of the South Atlantic, east South Central, and west South Central States. The west North Central States have 10 per cent of the total, the Pacific States 11.5 per cent, while nearly one-half of the sheep of the Nation, or 43.3 per cent, are in the Mountain States, where sheep raising is a range industry. Particulars with regard to the geographic distribution of sheep may be found in Table 2.

## SHEEP MARKETING.

The receipts of sheep at seven principal marketing centers have been compiled for 1900 to 1913, with results that may be found in Table 3. The record shows a marked increase in the number of sheep received for slaughter at these places after 1909, leading up to the highest number ever received, 14,000,000, in 1913. Here is clearly a case of the slaughtering of production stock kept for wool production.

#### HAVE SHEEP A PLACE ON AMERICAN FARMS?

The following paragraphs by George M. Rommel, Chief of the Division of Animal Husbandry, Bureau of Animal Industry, are included here as of interest in the discussion of sheep:

The estimates of the department for the number of sheep on farms in the United States on January 1, 1914, show a decided decrease as compared with 1913. The apparent tendency toward a decline in the number of sheep on farms has been noted for some time and has caused sheep raising on farms to be referred to as a waning industry. A word here concerning the economy of sheep and their place in agricultural practice may not be out of place.

As a farm animal per se, the sheep has many distinct advantages.

- (1) The sheep is a much more economical animal to feed than the steer, returning a larger amount of gain per 100 pounds of feed eaten. When his capacity to consume roughage is considered, he is more economical than the hog.
- (2) The sheep yields a double return—meat at an economical cost, and wool as a by-product—which will go far toward defraying the cost of keep.
- (3) Sheep are prolific. A farm flock which does not yield at least 100 per cent increase is very poor indeed.
- (4)  $\Lambda$  flock of sheep on a farm will, in time, clear it of weeds, without expense to the owner, if allowed to range the lanes, the stubble fields after grain is cut, and the cornfields after the corn is full grown. As a scavenger, even a goat is not more useful than a sheep.

As meat-food animals sheep have never been sufficiently appreciated in the United States. They are, however, of very great value. They must be classed with hoge and poultry as the most available animals to supply meat for home use on the averags farm. They are readily slaughtered, the meat can be kept without difficulty; it cuts up without waste in sizes which are convenient for the average family, and the meat is nutritious, wholesome, and palatable when properly cooked. The healthfulness of the sheep alone gives it front rank as a meat-food animal. Sheep rarely have tuberculosis or other diseases communicable to man.

The foregoing statements are axiomatic. If the sheep industry is so inviting, why do our farmers seem to be showing a tendency to curtail sheep raising? In my opinion there are three principal causes.

First. Intestinal parasites, principally stomach worms, cause serious losses in farm flocks over the whole country, and almost entire lamb crops are sometimes exterminated. In no farming sections are sheep free from this danger, and no breed of sheep is immune, although some breeds—the Merinos, for example—are less susceptible than others. No infallible cure for stomach worms is known, but it is possible to control them economically by keeping the lambs away from the ewes except when nursing, and by a system of pasture rotation. Unless a farmer is willing to take precautions in the management of the flock he should not raise sheep.

Second. Cur dogs are almost as great a hindrance to the sheep industry as parasites. The only protection against them is to keep the flock during the day where it can be watched and to put it into a dog-proof inclosure at night. An authentic case has recently been reported from Michigan where a flock of more than 200 head were all run to death in one night by two cur dogs. Dog-tight night folds can be built of woven wire at small expense.

Third. Farmers have not generally recognized the proper place of the sheep in agriculture in the settled regions. Too much importance is placed on wool. Except on the range, where land is cheap, the wool should be regarded as an incidental—a side line to help defray the cost of handling. Raising sheep for wool alone does

not pay on farms, and the attempts of farmers to make it pay is undoubtedly largely responsible for the prevailing opinion that sheep are not profitable on expensive land. Sheep are raised in England on some of the most expensive land in the Kingdom, but they are raised as meat animals and not as wool producers; the wool is a by-product, as it should be in farm flocks.

If only 25 per cent of the farms on which there are now no sheep should have a flock of not over 25 or 30 ewes, managed with reasonable care and protected against dogs, not only would farm revenues be materially increased but a decided step in advance would be taken toward the solution of our meat-supply problem.

#### SWINE

#### NUMBER.

Although the estimated number of swine on farms January 1, 1914, 58,933,000, was 1.3 per cent more than the census number for 1910, the decline from 1913 was 3.7 per cent. This decline is partly accounted for by the extensive prevalence of hog cholera, by high-priced corn, by the deficient production of 1913 because of a severe long-continued and extensive drought and because of the high prices of swine for slaughter. Notwithstanding the high price of hogs for slaughter, farmers found that they could not profitably feed the high-priced corn. At the same time, the price of hogs per hundred pounds was high relatively, although not as high as corn. In this situation hogs were often sent to market undersized.

#### AVERAGE WEIGHT OF HOGS ON THE FARM.

The average size of hogs on the farm January 1 has never been directly ascertained, but it may be computed from the average price per head divided by the average price per hundred pounds, as ascertained by this bureau. As a result of this operation, the average weight of a hog on the farm January 1, 1914, was 145 pounds; in 1913 it was 144 pounds; in 1912, 140 pounds; and in 1911, 131 pounds. The marketing of low-weight hogs, which has been frequently commented upon in live-stock and commercial papers during the last three years, is apparent in the foregoing average weights, which are apparently high because the lighter hogs have been sold off.

#### VALUE.

The average value of swine on farms per head January 1, 1914, was \$10.40, or 5.5 per cent above the average value of January 1, 1913, and 13.4 per cent above that of 1910. In consequence of the increased value of swine per head, the total value of all swine on farms is estimated at \$612,951,000, or a gain of 1.6 per cent over 1913 and 14.9 per cent over 1910. The diminution of swine January 1, 1914, was more than counterbalanced by the increased price per head of those that were on hand.

Particulars for the number and value of swine are presented in Table 15 for the various States.

#### RELATION TO POPULATION.

Swine are quite as conspicuous as sheep in exhibiting a declining per capita ratio. At the time of the census of 1840, the number of swine per capita of population was 1.54. Steadily the ratio declined to 0.65 of 1 animal in 1870, but from that low average there was recovery to 0.95 of 1 animal in 1880. After that year the decline was steady to 0.60 to 1 animal per capita of population in 1914. These figures may be found in Table 1.

## CHANGES IN GEOGRAPHIC IMPORTANCE.

Great changes have taken place in the geographic redistribution of swine since 1840, when the East South Central States led the geographic divisions of the country in the possession of number of swine. The fraction of the national total in that division was then 29.1 per cent. Next in order at that time was the South Atlantic group with 25.0 per cent; so that the South, east of the Mississippi River, possessed 54.1 per cent of the swine of the country at that date.

In 1914 the leading division is the West North Central States, while the division second in importance is the East North Central States. Altogether, these divisions have 59.1 per cent of the Nation's swine, or a little more than the South east of the Mississippi River possessed in 1840 as a fraction of the Nation's total. In 1914 the division that is third in importance in the possession of swine is the West South Central, with the fraction of 11.7 per cent of the Nation's swine. After this follow in order the South Atlantic States with 11.2 per cent, the East South Central States with 9.9 per cent, the Middle Atlantic States with 3.5 per cent, the Pacific States with 2.4 per cent, the Mountain States with 1.5 per cent, and New England with 0.7 of 1 per cent. Details of the geographic distribution may be found in Table 2.

## COMMERCIAL MOVEMENT.

Hogs are more prolific than any other farm animal and consequently contribute a larger number to slaughter than any other class. In seven markets the receipts of hogs from 1900 to 1913 may be found expressed in Table 3. Swine have the ability to recuperate in numbers after extraordinary losses more quickly than any other class of animals. For illustration, it may be observed that in 1908 an extremely large number of hogs were received at these seven principal markets, and that was the year when there was a large slaughter of production stock. The marketing of the two following years indicate as much, but in the third year thereafter there had been recuperation. In 1913 the hogs received at these markets numbered 19,924,331, which was somewhat under the 20,265,667 received in 1912. The receipts in 1913 at these seven markets have been exceeded in 1901, 1908, 1911, and 1912.

#### HORSES.

#### NUMBER MAINTAINED AGAINST OBSTACLES.

In the days of the bicycle's rapid increase in popularity, it was supposed that the horse would be considerably displaced by that machine. Then came the use of electric power for urban and suburban street cars, and this was in turn followed by the automobile, which, in popular belief, is pushing the horse toward extinction. A little-noticed competition to the horse is the increasing use of farm tractors, most of which receive their power from gasoline.

In spite of everything that has been threatening, the horses of the census of 1910, which numbered 19,833,000, have increased to 20,962,000 January 1, 1914, or 5.7 per cent. The increase over 1913 is 1.9 per cent.

Although the horses are maintaining their numbers and, indeed, are increasing, the relative importance of breeds is changing. The automobile is having the effect of diminishing the number of light driving horses, and, notwithstanding the increased use of autotrucks, the number of heavy draft horses has much increased in importance. The old-time prairie ponies have been substantially pushed aside by the better-bred horse. In Texas, for instance, these ponies have been mostly eliminated with the disappearance of ranches and the development of agriculture, which demands horses of better blood and higher value.

On the other hand, there is a decline in the number of horses in California, owing to an unusually extensive and general use of auto-trucks and traction engines.

## VALUE.

The value of horses per head January 1, 1914, is \$109.32, a decrease of 1.3 per cent from 1913, but an increase of 1.2 per cent over 1910. As a result of a larger number of horses in 1914 than in 1913, although the value per head is lower, the total value of all horses on farms January 1, 1914, is \$2,291,638,000, or an increase of 0.6 per cent over 1913 and of 7 per cent over 1910. The value and number of horses on farms January 1, 1914, was the highest ever reached in this country.

Details for number and value of horses in the separate States may be found in Table 16.

The average value of horses per head is based on horses of all ages and breeds. In connection with this average, in recent years, it may be mentioned that this bureau recently ascertained that the cost of raising a horse until 3 years old, as a general average for the United States, was \$104.05, from which should be subtracted the average value of the work done, \$7.52, leaving the net cost at \$96.53, which, at the time when the cost was determined, was 70.9 per cent of the

farm value of a 3-year old. The most important element in the cost of raising a horse was the cost of feed, which amounted to 54.1 per cent of the total cost.

#### PER CAPITA OF POPULATION.

The number of horses on farms can be better understood if they are compared with population. In 1850 there was 0.19 of 1 horse per capita of population, and the ratio remained about the same until about 1890 and 1900, when the ratio was 0.24 of 1 horse. After 1900 the ratio declined to 0.21 of 1 horse in 1914, or to as high a ratio as existed before 1890 and to a higher one than existed before 1880. For figures relating to the per capita ratios, Table 1 may be examined.

#### MULES.

## NUMBER AND VALUE.

Mules as well as horses have been more than maintained in number. From the census number of mules in 1910, the increase is to 4,449,000, the number for January 1, 1914, or 5.7 per cent, and the increase in 1914 over 1913 is 1.4 per cent.

There has been a slight falling off in the average value of farm mules per head January 1, 1914, as compared with the preceding year, and the latter value, \$123.85, is 0.4 of 1 per cent lower than the former, but the increase over 1910 is 3 per cent. In consequence of the increased number, in spite of the diminished value per head the total value of all mules on farms reached the heretofore unequaled total of \$551,017,000 January 1, 1914, which was an increase of 11 per cent over 1913 and of 8.9 per cent over 1910.

State details of number and value of mules are given in Table 17. The mule is the only farm animal covered by this report which has increased per capita of population. The ratio in 1850 was 0.02 of 1 mule per capita of population and the ratio remained substantially at 0.04 of 1 mule from 1860 to 1900, after which it rose to 0.05 of 1 mule per capita of the population. The increased use of mules has followed the expansion of cotton growing and perhaps this fact more than anything else has caused the increase of number and of per capita number of mules.

## SUMMARY OF NUMBER AND TOTAL VALUE.

It remains now to aggregate the farm animals for number and total value. The cattle of January 1, 1914, according to the estimates, had a total of 56,592,000 head, and this was an increase of 0.1 per cent from 1913 and a decrease of 8.4 per cent from 1910. The aggregate value, however, on account of the great increase in the average value per head, became \$2,234,820,000 for January 1, 1914, for all cattle, or an increase of 19.4 per cent over 1913 and 47.7 per cent over 1910.

Although differing widely in the uses and values per head, the farm animals covered by this report, namely, horses, mules, milch cows, other cattle, sheep, and swine, are aggregated for several years for the purpose of a rough comparison. The total aggregate number of these six classes of animals, as determined by the census of 1910, was 196,480,000 head. In 1913 the number was estimated by this bureau at 194,140,000, and the estimate of January 1, 1914, is 190,655,000 head, a decrease of 1.8 per cent from 1913 and of 3 per cent from 1910. On the other hand increases, are found in aggregate values. For 1910 the value of these six classes of farm animals was \$4,910,975,000; for 1913, \$5,501,783,000; and for 1914, \$5,891,-229,000, or an increase of 7.1 per cent over 1913 and of 20 per cent over 1910.

## BREEDING FEMALES.

An important change occurred in the relative number of the breeding females in the case of cattle and sheep from 1900 to 1910. In 1900 the cows and heifers were 53 per cent of all cattle, but the percentage increased to 65 in 1910, showing how much more closely the other members of the herds had been sold off. The computation for ewes shows that they were 52 per cent of all sheep in 1900, but had become 60 per cent in 1910. The explanation is doubtless the same as the one for cattle.

## MEAT PRODUCTION AND CONSUMPTION.

## A NATIONAL PROBLEM.

Four distinctive classes of meat animals supply nearly the entire meat production of this country. These are milch cows, other cattle, sheep, and swine. Milch cows have maintained a substantially uniform number since the census of 1910 and then declined relative to population. There has been a decided absolute decline in the number of other cattle and a considerable decline of sheep, with the prospect of continued decline until the sheep industry can be established primarily on a meat basis with wool as a by-product. Swine have declined during the last three years, but still the number is absolutely larger than in 1910, although the per capita number is diminishing. In view of these circumstances, a statement of what is known with regard to the production and consumption of meat in this country must be of national interest.

## AMOUNTS EXPRESSED IN DRESSED WEIGHT.

It has been estimated by this bureau that the production of meat in 1900 amounted to 16,052,000,000 pounds, as customarily expressed in dressed weight, but including lard. This does not include the extra edible parts, such as heart, liver, tongue, etc.

Of this production, 2,433,000,000 pounds were exported, so that the consumption amounted to 13,619,000,000 pounds, dressed weight. The consumption of beef in 1900 disposed of 5,853,000,000 pounds; of veal, 758,000,000 pounds; total beef and veal, 6,611,000,000 pounds; of mutton and lamb, 587,000,000 pounds; of pork excluding lard, 5,405,000,000 pounds; of lard, 1,017,000,000 pounds; total pork, including lard, 6,422,000,000 pounds.

An estimate of the production of meat in 1909, partly resting on the method previously adopted by this bureau, but taking advantage of additional information provided by the census, was made by Mr. John Roberts, of the Bureau of Animal Industry, and published in the annual report of that bureau for 1911. In this estimate the production of meat in 1909, on the basis of dressed weight, including lard, was 16,863,000,000 pounds, or 811,000,000 pounds more than in 1900.

The exports, however, declined to 1,263,000,000 pounds, or almost exactly one-half the exports of 1900, and the meat remaining for consumption, as expressed in dressed weight, was 15,600,000,000 pounds, or 1,981,000,000 pounds more than in 1900.

The consumption of beef increased during the nine years to 7,276,-000,000 pounds, or 1,423,000,000 pounds more than in 1900, but the consumption of veal fell to 683,000,000 pounds, or 75,000,000 below the amount of 1900.

The mutton and lamb consumption in 1909 is estimated at 596,-000,000 pounds, or an increase of 9,000,000 pounds above the consumption of 1900.

The pork and lard consumption for 1909 presents an increase of 612,000,000 pounds for 1909, as compared with 1900, and amounted to 7,034,000,000 pounds. An estimate of the consumption of goat meat in 1909 results in 11,773,000 pounds.

## PER CAPITA RATIOS.

Still bearing in mind that the foregoing figures stand for dressed meat weight and exclude the many extra edible parts that go into consumption, a comparison of 1909 with 1900 may be made with regard to per capita production and consumption of meat that is embraced in the description "dressed weight."

By a rough and very imperfect computation, the production and consumption of meat in 1914 an estimated and these estimates in per capita form of expression are introduced for expanding the comparison.

The per capita production of dressed weight meat declined from 211.2 pounds in 1900 to 186.2 pounds in 1909 and to 160.6 pounds for 1914, and the per capita exports of meat declined from 32 pounds in 1900 to 14 pounds in 1909, and to 8.7 pounds in the fiscal year 1913.

The consumption of meat, dressed weight, per capita, declined from 179.2 pounds in 1900 to 172.3 pounds in 1909, and then to 151.9 pounds for 1914.

Comparison of 1909 with 1900 with regard to different kinds of meat is not extended to 1914. For beef there was an increase of per capita consumption from 77 to 80.3 pounds, but the consumption of veal declined from 10 to 7.6 pounds, so that the per capita consumption of beef and veal increased almost 1 pound, or from 87 to 87.9 pounds.

The per capita consumption of mutton and lamb fell from 7.7 pounds to 6.6 pounds from 1900 to 1909, and the per capita consumption of pork, including lard, declined from 84.5 to 77.7 pounds. Goat meat was consumed to the extent of 0.13 of 1 pound per capita in 1909.

## DRESSED WEIGHT AND EXTRA EDIBLE PARTS.

The foregoing numbers refer to meat production and consumption in terms of dressed weight and are fairly comparable with similar numbers for foreign countries. The dressed weight basis is the one commonly adopted. There is a large production of meat, however, which has been termed "extra edible parts." These are not included in dressed weight. This bureau has estimated the production of meat embraced within the description of "extra edible parts" for 1900, and a similar estimate has been made by Mr. Roberts, of the Bureau of Animal Industry, for 1909; a very rough and imperfect calculation of this production has been added for 1914.

The years 1900, 1909, and 1914 may now be compared with one another with regard to the production and consumption of all meat; that is, the dressed-weight meat, plus the extra edible parts. The extra edible parts contributed 2,601,000,000 pounds of meat to the dressed weight in 1900 and 2,366,000,000 pounds in 1909, so that the per capita consumption of meat in dressed weight was increased on this account by 34.2 pounds in 1900 and by 26.1 pounds in 1909. The per capita consumption of meat, including extra edible parts, was 213.4 pounds in 1900, 198.4 pounds in 1909, 160.3 pounds for 1914; and the total consumption was 16,220,000,000 pounds in 1900, 17,966,000,000 pounds in 1909, and, as roughly estimated, of 15,810,000,000 pounds of meat in 1914.

The total production of meat, including extra edible parts, was 18,653,000,000 pounds in 1900, or 245.5 pounds per capita; it was 19,229,000,000 pounds in 1909, or 212.3 pounds per capita; and the estimate for 1914 is 16,675,000,000 pounds, or 169 pounds per capita.

During the nine years from 1900 to 1909 the total meat production, including extra edible parts, increased 576,000,000 pounds, or 3.1 per cent; but from 1900 to 1914 the meat production decreased 1,978,000,000 pounds, or 10.6 per cent. The total meat consump-

tion, including extra edible parts, increased 1,746,000,000 pounds, or 10.8 per cent, from 1900 to 1909; but from 1900 to 1914 the estimate indicates a decrease of 410,000,000 pounds, or 2.5 per cent.

The exports of meat decreased 1,170,000,000 pounds, or 48.1 per cent, from 1900 to 1909, and the decrease from 1900 to the fiscal year 1913 was 1,568,146,000 pounds, or 64.5 per cent.

The population increased 19.2 per cent from 1900 to 1909, and the estimate of increase for 1914 over 1900 is 29.8 per cent.

Finally, it may be stated that the per capita consumption of meat, including the extra edible parts, decreased 7 per cent from 1900 to 1909, and 24.9 per cent from 1900 to 1914. The production and consumption of dressed-weight meat are expressed in tabular form in Table 5.

Table 5.—Estimated total and per capita production and consumption of meat, 1900 and 1909.

[Bureau of Statistics (Agricultural Forecasts) and	Bureau of Animal	Industry.	Computed on the basis
of dressed weights; approximately comp	parable with estima	ates for fore	ign countries ]

Kind of meat.	Total 1	oounds.	Per capita pounds.	
	1900	1909	1900	1909
PRODUCTION.		College of the Colleg		
Production (consumption and exports) Exports.	16,052,487,000 2,433,035,000	16,862,987,000 1,263,033,000	211.2 32.0	186, 2 14, 0
CONSUMPTION.				
BeefVeal	5,852,815,000 758,030,000	7, 275, 632, 000 682, 826, 000	77. 0 10. 0	80. 3 7. 6
Total	6,610,845,000	7,958,458,000	87.0	87.9
Mutton and Lamb <sup>1</sup>	586,972,000	595,888,000	7.7	6.0
Pork (excluding lard)Lard	5,404,624,000 1,017,011,000	6,122,796,000 911,039,000	71. 1 13. 4	67. 6 10. 1
Total	6,421,635,000	7,033,835,000	84.5	77.7
Goat meat		11,773.000		. 1
Total meat (including lard.)	13,619,452,000	15, 599, 954, 000	179.2	172.3

<sup>&</sup>lt;sup>1</sup> A former estimate of mutton and lamb production for 1990 made by the Bureau of Statistics (Agricultural Forecasts) has been reduced to place it on the census basis for 1909 and especially to make it conform to the smaller number of animals on April 15, the date of the census for 1910, instead of to the number on June 1, the date of the census for 1900.

## IMPORTS OF MEAT AND MEAT ANIMALS.

A statement of quantities of imports of meat and meat animals for the fiscal years 1912 and 1913, and the first five or six months of the fiscal year 1914 may be found in Table 6. In this table it appears that the total number of cattle, including a few introduced for breeding purposes, imported in 1912 was 318,372; in 1913, 421,649; and in the first five months of 1914, 404,313. The imports of the five months are almost entirely from Mexico and Canada.

The imported sheep of 1912 number 23,588; of 1913, 15,428; and for the first five months of 1914, 75,620, mostly from Canada.

During the first six months of the fiscal year 1914, the imports of beef and veal had a total of 33,645,364 pounds; of mutton and lamb, 439,065 pounds; of pork, 286,871 pounds; of bacon and hams, 116,130 pounds. The imports for previous years were so small that they were not separately designated in the reports of the Department of Commerce.

Table 6.—Imports, 1912, 1913, and total for 5 months, July-November, 1913.

		Quantity.		
Commodity.	Year endin	5 months, July-No-		
	1912	1913	vember, 1913.	
(Dutiable, July-September,	Number.	Number.	Number. 150,016	
Cattle {Dutiable, July-September	1,350 315,227 1,795	391, 477 981	253, 757 181, 617 221, 818 878	
Total	318, 372	421,649	404, 313	
sheep{Dutiable, July-September	17, 629 5, 152 802			
Total	23,588	15, 428	75, 620	
Geef and veal (July-December) futton and lamb (August-December) ork (August-December) Bacon and hams (October-November)			Pounds.  1 33, 645, 364  1 439, 065  1 286, 871  1 116, 136	
lausages, bologna: Denmark France Germany Italy Netherlands Mexico	34,023 11,015 619,310 6,120 33,832 263,852			
Total (July-December)	971,775	728, 469	1 410, 563	

<sup>&</sup>lt;sup>1</sup> Total, six months, July to December. July to November, from Department of Commerce; December, rom Bureau of Animal Industry inspected meat report.

#### INSPECTION OF IMPORTED MEATS.

The new tariff act provides that imported meats and meat products shall be inspected by the Bureau of Animal Industry of this department before being allowed to enter this country for consumption. The quantities of inspected meats and meat products imported from October 4 to December 31, 1913, are expressed in tabular form in Table 7, with specification of the countries from which the imports were consigned. The meats are expressed as fresh and frozen beef and veal, mutton, and pork; canned beef and veal, and other meats; cured beef and pork; sausage; oleo-stearin, and other meat products.

The total number of pounds of meat and meat products imported and not condemned in October, 1913, was 6,000,735; in November, 11,820,889; in December, 16,074,520 pounds; total, three months, 33,896,144 pounds. The condemned meat of the three months weighed 17,493 pounds.

The principal countries contributing to the total were, in order of magnitude of contributions, Argentina, Canada, and Australia. Table 7 may be examined for further details.

Table 7.—Imported meat and principal meat products from principal countries, inspected by the Bureau of Animal Industry, October to December, 1913.

	Total	Fı	esh and froz	en.	Canned.		
Month and country from which consigned.	not con- demned.	Beef and veal.	Mutton.	Pork.	Beef and veal.	Other meats.	
1913.							
October:	Pounds. 2,115,864	Pounds. 2,069,794	Pounds.	Pounds.	Pounds.	Pounds.	
Australia Canada	2,501,108	2,337,272	2,179 958	5,942	152,280 25,338		
MexicoUruguay	2, 115, 864 807, 604 2, 501, 108 15, 272 559, 843	653, 145 2, 337, 272 5, 357 559, 843	9,915				
Other countries	1,044				30		
Total	6,000,735	5,625,411	13,052	5,942	177,648		
November: Argentina	4,093,836	3,988,898	10, 204		31, 025		
Australia	4,093,836 1,917,538 5,625,402 40,858 143,255	3,988,898 1,681,156 4,811,998	5,708	174 010	31,025 230,571	5,81 2,37	
Mexico	40,858	27,073 179	13, 785 1,000	174,019	36, 778		
Other countries	143, 255	179	1,000		1,499	17	
Total	11,820,889	10,509,304	30,697	174,019	299, 873	8,36	
December: Argentina	10 254 674	0 440 400	007 400		100 170		
Australia	10, 354, 674 1, 854, 895	9, 440, 488 1, 289, 143	237, 422 80, 918		130,176 483,894	88	
Canada France	1 - 2,601,273	2,057,481	8, 254	132, 243	8,366	1,64	
Germany	477, 266 129, 279	293			545	• • • • • • • • • • • • • • • • • • • •	
Mexico Uruguay	25, 417 494, 454 137, 262	25, 417 494, 454					
Other countries	137, 262		54		13,360	4,67	
Total	16,074,520	13,307,276	326, 648	132, 243	636, 341	7, 19	
	Cured.  Beef. Pork.						
Month and country from which consigned.			Sausage.	Oleo stearin.	Other meat products.	Con- demned.	
1913.							
October: Argentina	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	
				1000000	Tounus.	I ounds.	
Australia				46, 070	Younus,		
Australia. Canada.	8,575	114, 214	3	46, 070	8,806	794 3, 870	
Australia	8,575	114, 214 250		46,070		79 3,87	
Australia Canada Mexico	8,575 8,575		3	46, 070		792 3,877 22 4,690	
Australia Canada Mexico Other countries Total November:		250	3 764	46, 070	8,806	79/ 3, 870 2	
Australia. Canada. Mexico. Other countries. Total. November: Argentina.		250	3 764	46, 070	8,806	795 3, 876 22 4, 699	
Australia. Canada. Mexico. Other countries. Total. November: Argentina. Australia. Canada.	8,575	250 114, 464	764 767	46, 070 46, 070 63, 709	8,806	79 3, 87 2 4, 69 46 65 13, 04	
Australia. Canada. Mexico. Other countries.  Total.  Vovember: Argentina. Australia. Canada. Other countries.	8,575 8,575 114,130 170	250 114, 464 458, 417 16, 191	3 764 767 908 13,371	46, 070 46, 070 63, 709	8,806 8,806 21,068	799 3,876 2 4,69 46 65 13,04	
Australia Canada Mexico Other countries  Total  Vovember: Argentina Australia Canada Other countries  Total	8,575	250 114, 464	764 767	46, 070 46, 070 63, 709	8,806 8,806	799 3,876 2 4,69 46 65 13,04	
Australia. Canada. Mexico. Other countries.  Total. November: Argentina. Australia. Canada. Other countries.  Total.	8,575 8,575 114,130 170	250 114, 464 458, 417 16, 191	3 764 767 	46, 070 46, 070 63, 709 110, 670 174, 379	8,806 8,806 21,068	799 3,877 2 4,69 466 655 13,044 11	
Australia Canada Mexico Other countries  Total  November: Argentina Australia Canada Other countries  Total	8,575 114,130 170 114,300	250 114,464 458,417 16,191 474,608	3 764 767 908 13,371 14,279	46, 070 46, 070 63, 709	8,806 8,806 21,068 21,068	799 3, 871 2 4, 69 46: 66: 13, 044 1: 14, 18	
Australia Canada Mexico Other countries  Total November: Argentina Australia Canada Other countries  Total December: Argentina Australia Canada France	8,575 114,130 170 114,300 149,004 929	250 114, 464 458, 417 16, 191 474, 608	3 764 767 908 13,371 14,279	46, 070 46, 070 63, 709 110, 670 174, 379	8,806 8,806 21,068	799 3, 877 22 4, 690 465 655 13, 044 14, 185	
Australia Canada Mexico. Other countries  Total November: Argentina Australia Canada Other countries  Total  December: Argentina Australia Canada France Germany Mexico.	8,575 114,130 170 114,300	250 114,464 458,417 16,191 474,608	3 764 767 908 13,371 14,279	46, 070 46, 070 63, 709 110, 670 174, 379 546, 588	8,806 8,806 21,068 21,068	798 3, 871 2 4, 699 466 655 13, 044 11 14, 18 810	
Australia Canada Mexico Other countries  Total November: Argentina Australia Canada Other countries  Total  December: Argentina Australia Canada France Germany	8,575 114,130 170 114,300 149,004 929	250 114, 464 458, 417 16, 191 474, 608	3 764 767 908 13,371 14,279	46, 070 46, 070 63, 709 110, 670 174, 379 546, 588	8,806 8,806 21,068 21,068	799 3, 870 28	

### OLD AND NEW TARIFF RATES.

For its bearing on the supply of meat and meat products from other countries a concise statement of the old and new tariff rates on meat animals and some of their products and on dairy products has been prepared and may be found in Table 8. It will be observed that the meat animals may be imported free of duty and also all meats, whereas formerly rates of duty were provided.

Table 8.—Old and new tariff rates on meat animals and on principal meat and meatanimal products.

Commodity.	Before Oct. 4, 1913.	Oct. 4, 1913, and after.
Animals: Asses	Breeding purposes and teams of immigrants, free; all other, 20 per cent ad valorem.	Breeding purposes and teams of immigrants, free; all other, 10 per cent ad va- lorem.
Cattle	Breeding purposes and teams of immigrants, free; all other: Less than 1 year, \$2 per head; all other, worth not over \$14, \$3.75 per head; worth over \$14, 272 per cent ad valorem.	Free.
Goats	20 per cent ad valorem Breeding purposes and teams of immigrants, free; all other: Worth \$150 or less per head, \$30; worth over \$150, 25 per cent ad valorem.	Free. Breeding purposes and teams of immigrants, free; all other, 10 per cent ad va- lorem.
MulesSheep	Breeding purposes, free; all other: Less than 1 year old, 75 cents per head; 1 year old and over, \$1.50.	Same as horses. Free.
Swine Dairy products:	Breeding purposes, free; all other, \$1.50 per head.	Free.
Butter	Fresh, 2 cents per gallon; condensed and evapo-	2½ cents per pound. 20 per cent ad valorem. Free. Free.
Hides and skins, raw	rated, 2 cents per pound.	Free.
Beef and veal	Fresh beef, 1½ cents per pound; other beef, 25 per cent ad valorem; yeal, 1½ cents per pound.	Free.
Muttor and lamb Pork	14 cents per pound	Free.
Sausage	Bologna, or frankfurter, free; other sausage, 25 per cent ad valorem.	Free.
Wool	Class 1, clothing, etc., wools: Unwashed, 11 cents per pound; washed, 22 cents; scoured, 33 cents. Class 2, combing, etc., wools: Unwashed, 12 cents per pound; washed, 12 cents; scoured, 36 cents. Class 3: Value not over 12 cents per pound, 12 cents; over 12 cents, 21 cents.	Free on and after Dec.1, 1913.

#### STOCKS OF POTATOES, JANUARY 1, 1914.

## COMPARISON WITH PRICES.

The yearly estimates of the amount of potatoes remaining in the growers' hands and the stocks in dealers' hands on January 1 in the important potato States indicate that a larger proportion of the marketable crop of potatoes was still in the hands of farmers on January 1, 1914, than had been the case for four years past. The proportion estimated to be in dealers' hands was smaller than for any year of the last four except January 1, 1912. The figures showed that the total estimated potato production of 1913 was below normal,

but owing to the slow movement of the crop up to January 1 the supply for the remainder of the year will be almost normal. Distribution, however, seems to be unusually uneven. The holdings of potatoes are relatively large in the important producing States of Maine, Michigan, Wisconsin, and Minnesota, and relatively small in New York, Ohio, Indiana, Illinois, Iowa, and Kansas, which are important both as potato-producing and potato-consuming States.

In consequence of the firm holding by farmers, the price early in the season has been unusually high, being on December 1 about  $17\frac{1}{2}$  cents per bushel higher than a year ago and  $16\frac{1}{2}$  cents higher than three years ago, but  $11\frac{1}{2}$  cents lower than two years ago, when potatoes on January 1 were selling for  $77\frac{1}{2}$  cents per bushel and the supply was unusually short, owing to the drought of the previous year.

Present conditions do not seem to forecast material, if any, advance in prices in the important producing States this year; in 1911, when supplies were but moderately larger than now, and in 1913 the price movement after January 1 was downward instead of upward. The only other factor which may enter to change the experience of 1911 and 1913 is the somewhat different distribution of the crop which exists this year.

Southern growers who plant in the spring for the early market would seem to be justified from present conditions in putting out a normal acreage, but should not expect the big advance in prices which prevailed two years ago.

The estimates indicate that about 42.1 per cent of the marketable supply of potatoes of the 1913 crop remained in the hands of farmers and 9.5 per cent in the hands of dealers on January 1, in the important These figures compare with 39.8 and 9.8 potato-growing States. per cent similarly estimated a year ago; 33.1 and 8.6 per cent two years ago; 40.2 and 10.9 per cent three years ago; and 41.2 and 9.9 per cent four years ago. If, for the purpose of comparison, these percentages were applied to the estimates of total production, it would show total stocks of 123,000,000 bushels on January 1, 1914 (in the 19 States of Table 18), compared with 150,000,000 a year ago, 91,000,000 two years ago, 133,000,000 three years ago, and 142,000,-000 four years ago. These figures would indicate that the quantity to be carried toward the close of the season will not be sufficient to cause depressed prices, as was the case particularly four years ago (in some States last year also), nor, on the other hand, will they be so scant as to cause so high prices as prevailed in the spring of 1912.

To show the relation between supplies and prices, Table 18 is given, showing for the past four years the production, stock on hand January 1, and the prices paid to producers on December 1 and the following March 1, in the important potato-growing States.

#### COMPARISON WITH IMPORTS.

The relation between imports of potatoes and production in this country may be observed in Table 9. In this table it appears at a glance that the extraordinary importation of nearly 14,000,000 bushels of potatoes, in the year beginning July 1, 1911, was in consequence of the extraordinary low production of that year. When an unusually large crop was harvested in the following year, the imports fell to only 337,230 bushels. It is apparent, also, that the imports of potatoes already received in this fiscal year are unusually large in comparison with the crop of 1913, which may be rated as low medium.

	Imp	United States	
Year beginning July 1—	Bushels.	Value.	production in calendar year.
1909	218, 984 13, 734, 695 337, 230	\$306, 815 235, 847 7, 168, 627 303, 214	420, 647, 000 331, 525, 00 <b>9</b>
MONTH, 1913.	- 010		
July	5,310 10,411	4,314	
September			
October		202, 356	

Table 9.—Imports of potatoes.

### WHEAT CROP OF THE "WORLD."

764, 829

346,679

November....

#### NOW EXCEEDS 4,000,000,000 BUSHELS.

A full statement of the estimated area and production of wheat for 1913 and also for the preceding two years, for all countries of the world for which information is obtainable, may be found in Table 19 Estimates of this sort have been made by the Bureau of Statistics (Agricultural Forecasts) for many years. The numbers expressing total production for these years have been assembled in Table 10. appears that the world's production of wheat, as far as ascertainable, was 2,432,000,000 bushels in 1891; that the number reached 3,000.000,000 in 1902, when the total was 3,090,000,000 bushels; and that 4,000,000,000 was reached in 1913, when the total was 4,126,000,000 bushels.

Production. Year. Production. Year. Rushels Bushcls.
3, 189, 813, 000
3, 163, 542, 000
3, 327, 084, 000
3, 133, 965, 000
3, 182, 105, 000
3, 182, 105, 000
3, 581, 519, 000
3, 575, 055, 000
3, 587, 000
4, 125, 658, 000 Bushels. Bushels. 2, 432, 322, 000 2, 481, 805, 000 2, 559, 174, 000 2, 560, 557, 000 2, 593, 312, 000 2, 506, 320, 000 2, 236, 268, 000 2, 783, 885, 000 1893 1895. 1907 1008 1909 1910 2,783,885,000 2,640,751,000 2,955,975,000 3,090,116,000 1899. 1911 1912 1001 F902.

Table 10.—Total production of wheat in countries named in Table 19.

## CROP-VALUE COMPARISONS.

The estimated total value of corn, wheat, oats, barley, rye, buck-wheat, flaxseed, rice, potatoes, sweet potatoes, hay, tobacco, and lint cotton are given in Table 11; values are farm values on December 1 as estimated by the Department of Agriculture, except for cotton. For cotton, values for 1909 and 1911 are those given by the Bureau of the Census, Department of Commerce, for lint from the crops ginned in 1909–10 and 1911–12, respectively; for 1912 and 1913 the December farm price for cotton was applied to the Department of Agriculture's preliminary estimate of the production of lint cotton in 1912–13 and 1913–14, respectively.

Table 11.—Estimated value in 1913 of crops considered by the United States Department of Agriculture, with comparisons.

	Value	of crops e omit	numerate ted).	d (000	Value	Value of enu-	Rank of State.			Value.	Value.
State.				1909	of all crops, 1909 (census). (000	mer- ated crops, 1909, com-	Enu at ero	ed	All crops.	1913 com-	1913 com-
	1913	1912	1911	(census).	omit- ted )	pared with value of all crops.	1913	1909	1909	pared with 1912.	pared with 1909.
TexasIowa	\$400, 231 327, 996 295, 046	\$409, 974 284, 589 290, 071	\$287, 287 279, 238 318, 000	287, 065		91 92	$\frac{2}{3}$	3 2 1	3 2 1		+14.3
Georgia Ohio	217, 753 212, <b>4</b> 34	164, 573	199, 669 215, 866	176, 959	226,595	78	4	8 <b>4</b>	5 4	+32.3 +11.3	+23.1
Minnesota Indiana Missouri Pennsylvania Nebraska	194,178 185,917 174,520 168,998 162,078	160,615 153,750 197,470 176,365 141,634	176, 759 179, 556 187, 302 164, 083 153, 335	181, 234 188, 524 130, 010	204, 210 220, 664 166, 740	89 85 78	7 8	10 7 6 13 9	9 6 13	+20.9 $-11.6$ $-4.2$	$-7.4 \\ +30.0$
Alabama Wisconsin North Carolina New York South Carolina	156, 175 155, 465 150, 203 148, 767 139, 076	139, 032 132, 580 152, 533	135, 083 161, 419 122, 613 161, 785 121, 244	121, 048 102, 783 132, 620	148, 359 142, 890 209, 168	82 72 63	12 13 14	12	16 19 8	+11.8  +13.3  -2.5	+28.4  +46.1  +12.2

Table 11.—Estimated value in 1913 of crops considered by the United States Department of Agriculture, with comparisons—Continued.

•	Value	e of crops omi	enumerate tted.)	1. (000	Value	Value of enu-		Rank	τ.		
State.	1913	1912	1911	1909	of all crops, 1909 (census). (000	mer- ated erops, 1909, com- pared	at	mer- ed ps.	All crops.	1913 com- pared with 1912.	1913 com- pared with 1909,
	1015	1012		(census).	omit- ted.)	with value of all crops.	1913	1909	1909	1312.	1303,
<b>M</b> ississippi	130,622	114,609	103, 565	107,054	147, 316	P. ct.	16	21	17	P. ct.	P. ct.
Kansas	124, 136	182, 873	156, 713	189,091	214, 860		17	5	7	$+14.0 \\ -32.1$	+22.0 $-34.4$
Michigan	122, 555			114, 808	162,005	88 71	18	15	14		+ 6.7
Tennessee Oklahoma	114, 249 111, 532			93, 341 112, 344	120, 706 133, 454	77 84	19 20	23 17	24 22	+6.3 $-12.0$	$+22.4 \\7$
Kentucky	110,654			114, 202	138, 973	82	21	16	21	- 5.3	
North Dakota Arkansas	105, 356 103, 132		130,664 92,421	168, 292 86, 611	180,636	93	22 23	11	12	-32.1	-37.4
Virginia	100, 807	81, 476	75, 613	71,153	119, 419 100, 531	73 71	23	$\frac{24}{26}$	25 26	+6.0	$+19.1 \\ +41.7$
South Dakota	94, 397			109, 353	125, 507	87	25	19	23	- 5.3	-13.7
California Louisiana	88,897	101,609	105, 304	71,994	153, 111	47	26	25	15		+ 23.5
Washington	73, 335 73, 246	64, 658 68, 279	58, 091 75, 458	47,577 64,340	77, 336 78, 927	62 82	27 28	28 27	28	+13.4	+54.1
Colorado	43,149	38, 846	35,309	31, 416	50, 975	62	29	31	27 29	+11.1	$+\ 13.8 + 37.3$
West Virginia	42, 213	41, 865	31, 139	27, 749	40, 375	69	30	34	32	+ 0.8	+52.1
Montana	41, 214		40, 207	22,394	29,715	75	31	36	38	+ 2.0	+ 81.0
Oregon Maine	40,069 35,553		40, 691	33,140	49,041	68	32	29	30	- 3.2	+ 20.9
Idaho	35, 294	33, 499	39,670 40,019	27, 836 28, 816	39,318 34,358	71 84	33 34	33 32	34 36	-0.1 + 5.4	+ 27.7
Maryland	35, 089		34, 569	31, 454	43, 920	72	35	30	31	-2.1	$+\ 22.5 + 11.6$
New Jersey	30, 337	29, 782	28, 193	23, 396	40, 341	58	36	35	33	+ 1.9	+ 29.7
Vermont Florida	24, 332 19, 688		24, 158	18,577	27, 447	68	37	37	39	- 8.9	+ 31.0
Connecticut	18, 930		18, 203 20, 181	14,932 $14,872$	36,142 $22,488$	41 66	38 39	38 40	35	+15.8	$+ \frac{31.9}{27.9}$
Massachusetts	18, 432		17, 771	14, 916	31,948	47	40	39	40 37	-12.1 -5.7	$+\ 27.3  +\ 23.6$
Utah	17,698	17,446	15,969	13,682	18, 485	74	41	41	41	+ 1.4	
Wyoming	12,851	13,732	14,669	7,508	10,023	75	42	43	43	- 6.4	+71.2
New Hampshire Nevada	$11,201 \\ 9,980$	11,938 9,009	11, 977 9, 257	9, 233 4, 082	15, 976	58	43	42	42	<b>-</b> 6.2	+ 21.3
New Mexico	9,017	7,840	11, 138	5,591	5, 924 8, 922	69 63	44 45	46 45	46 45	$+10.8 \\ +15.0$	
Arizona	8,818	7,511	7,448	3, 993	5, 497	73	46	47	47	+17.4	+120.8
Delaware	7,810	7,971	8, 357	6,543	9, 122	72	47	44	44	- 2.0	+ 19.4
Rhode Island	2, 451	2,327	2, 461	2,030	3,937	52	48	48	48	+ 5.3	+ 20.7
United States	4, 905, 881	4,735,425	4,632,740	4,357,595	5, 486, 615	79.4				+ 3.6	+ 12.6

<sup>&</sup>lt;sup>1</sup> Includes \$800,000 for cotton in Arizona, California, Kansas, Kentucky, and New Mexico, not distributed

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by States.
<sup>2</sup> Includes \$150,000 for cotton in Arizona, California, Kansas, Kentucky, and New Mexico, not distributed by States.

Table 12.—Cattle other than milch cows: Estimated number on farms, and value, Jan. 1, 1914, with comparisons, by States.

	Nu	mber (00	90 omitte	ed).	Valı	ie per l Jan. 1.	nead,	Total v	alue, Jan. omitted).	1 (000
State.	Jan. 1 (es	t, 1914 t.).	Jan. 1, 1913	Apr. 15, 1910	1914	1913	1910	1914	1913	1910 2
	Per cent.1	Total.	(est.).	(cen- sus).	1914	1919	1910	1914	1919	1910 -
Maine New Hampshire Vermont Massachusetts Rhode Island	101 99 98 101 100	100 65 165 82 11	99 66 168 81 11	100 67 165 80 11	\$23. 40 26. 80 21. 10 23. 10 28. 10	\$21. 20 24. 00 18. 30 19. 90 20. 60	\$16.90 20.30 14.40 16.70 17.50	\$2,340 1,742 3,482 1,894 309	\$2,099 1,584 3,074 1,612 227	\$1,690 1,360 2,376 1,336
Connecticut	101	72	71	72	27. 90	22. 50	19. 10	2,009	1, 598	1, 375
	100	876	876	913	27. 20	22. 00	18. 20	23,827	19, 272	16, 617
	103	68	66	69	30. 50	25. 10	21. 40	2,074	1, 657	1, 477
	103	632	614	653	28. 30	23. 60	19. 20	17,886	14, 490	12, 538
	101	19	19	19	29. 20	23. 80	21. 00	555	452	399
Maryland	99	119	120	121	29. 40	24. 60	21. 10	3, 499	2, 952	2, 553
	98	450	459	503	27. 60	23. 20	19. 40	12, 420	10, 649	9, 758
	100	331	331	380	35. 90	29. 00	22. 50	11, 883	9, 599	8, 550
	98	365	372	392	17. 30	14. 90	12. 50	6, 314	5, 543	4, 900
	98	211	215	209	14. 90	14. 20	12. 00	3, 144	3, 053	2, 508
Georgia	99	660	667	674	12.70	11. 00	10.30	8, 382	7, 337	6, 942
Florida	96	735	766	729	13.70	12. 20	10.30	10, 070	9, 345	7, 509
Ohio	103	838	814	933	35.40	29. 80	24.10	29, 665	24, 257	22, 485
Indiana	103	707	686	729	33.90	30. 10	24.50	23, 967	20, 649	17, 860
Illinois	99	1,216	1,228	1,391	35.90	31. 50	26.40	43, 654	38, 682	36, 722
Michigan. Wisconsin. Minnesota. Iowa Missouri.	101	680	673	731	28. 10	22, 10	18. 50	19, 108	14, 873	13, 524
	102	1, 158	1, 135	1, 207	27. 10	21, 70	16. 40	31, 382	24, 630	19, 795
	103	1, 173	1, 139	1, 262	24. 30	20, 00	14. 30	28, 504	22, 780	18, 047
	98	2, 555	2, 607	3, 041	39. 20	33, 00	22. 20	100, 156	86, 031	67, 510
	96	1, 386	1, 444	1, 705	36. 10	31, 10	22. 60	50, 035	44, 908	38, 533
North Dakota	107	468	437	485	34. 60	27. 20	20. 50	16, 193	11, 886	9,942 $25,048$ $50,764$ $55,529$ $11,761$
South Dakota	102	912	894	1, 165	39. 50	32. 30	21. 50	36, 024	28, 876	
Nebraska	99	1,883	1,902	2, 318	38. 10	32. 40	21. 90	71, 742	61, 625	
Kansas	88	1,565	1,778	2, 343	36. 90	33. 40	23. 70	57, 748	59, 385	
Kentucky	95	527	555	591	28. 80	25. 90	19. 90	15, 178	14, 374	
Tennessee	94	498	530	600	21. 40	16. 90	13.80	10,657	8, 957	8, 280
	96	514	535	540	12. 00	10. 10	9.00	6,168	5, 404	4, 860
	94	490	521	583	13. 50	10. 40	8.40	6,615	5, 418	4, 897
	101	448	444	526	15. 30	12. 00	10.30	6,854	5, 328	5, 418
	103	5,173	5, 022	5,921	26. 50	22. 60	15.30	137,084	113, 497	90, 591
Oklahoma	95	1,097	1, 155	1,423	33. 40	27. 60	19. 20	36, 640	31,878	27,322
Arkansas	95	475	500	602	15. 80	12. 20	9. 00	7, 505	6,100	5,418
Montana	105	753	717	866	46. 40	38. 40	27. 40	34, 939	27,533	23,728
Wyoming	108	546	506	734	49. 40	38. 80	26 40	26, 972	19,633	19,378
Colorado	103	949	921	983	40. 00	34. 10	23. 00	37, 960	31,406	22,609
New Mexico	103	918	891	1, 031	32. 70	29. 00	17. 40	30, 019	25, 839	17, 939
	95	739	778	796	32. 50	29. 20	19. 30	24, 018	22, 718	15, 363
	101	356	352	336	35. 50	28. 50	18. 30	12, 638	10, 032	6, 149
	101	437	433	433	38. 90	33. 30	20. 70	16, 999	14, 419	8, 963
	104	354	340	368	41. 20	33. 50	21. 40	14, 585	11, 390	7, 875
Washington	107	199	186	216	35. 70	30.50	19.90	7, 104	5,673	4, 298
Oregon	104	470	452	552	38. 00	32.00	18.50	17, 860	14,464	10, 212
California	97	<b>1</b> ,410	1,454	1,610	33. 00	29.20	20.10	46, 530	42,457	32, 361
United States	99. 5	35, 855	36,030	41, 178	31.13	26.36	19. 07	1,116,333	949, 645	785, 261

<sup>&</sup>lt;sup>1</sup> Compared with Jan. 1, 1913. <sup>2</sup> Based on census numbers on Apr. 15 and the Department of Agriculture's estimated farm value per head Jan. 1, 1910.

Table 13.—Milch cows: Estimated number on farms, and value, Jan. 1, 1914, with comparisons, by States.

	Nu	mber (00	0 omitte	ed).	Valu	ie per h Jan. 1.	iead,	Total va	due, Jan. mitted).	1 (000
State.	Jan. 1 (es	, 1914 t.).	Jan. 1, 1913	Apr. 15, 1910	1914	1913	1910	1914	1913	1910 3
	Per cent.1	Total.	(est.).	(œn- sus).	1311	1015	1010	1314	1315	1310 -
Maine New Hampshire Vermont Massachusetts Rhode Island	101	159	157	157	\$47.50	\$46.00	\$33.00	\$7,552	\$7,222	\$5,181
	100	96	96	101	53.50	48.00	36.20	5,136	4,608	3,656
	100	265	265	265	47.50	44.50	34.20	12,588	11,792	9,063
	98	162	165	172	59.00	51.00	42.00	9,558	8,415	7,224
	99	23	23	23	70.00	52.50	43.80	1,610	1,208	1,007
Connecticut	102	120	118	123	58. 00	51.70	41.00	6, 960	6, 101	5, 043
New York	100	1,465	1,465	1,510	57. 00	50.00	39.50	83, 505	73, 250	59, 645
New Jersey	100	146	146	154	67. 00	55.20	47.50	9, 782	8, 059	7, 315
Pennsylvania	100	943	943	934	58. 40	46.60	39.00	55, 071	43, 944	36, 426
Delaware	100	39	38	36	52. 00	42.20	38.00	2, 028	1, 604	1, 368
Maryland	101	170	168	167	53. 80	42. 60	37. 30	9,146	7, 157	6, 229
	99	342	345	356	42. 00	34. 00	29. 70	14,364	11, 730	10, 573
	101	232	230	240	50. 00	42. 00	35. 00	11,600	9, 660	8, 400
	99	309	312	309	35. 10	30. 10	25. 50	10,846	9, 391	7, 880
	100	185	185	181	34. 20	32. 50	28. 90	6,327	6, 012	5, 231
GeorgiaFloridaOhioIndianaIllinois.	100	402	402	406	31. 30	28. 50	25. 00	12, 583	11, 457	10, 150
	104	128	123	116	38. 00	36. 00	32. 50	4, 864	4, 428	3, 770
	102	886	869	905	60. 00	50. 00	42. 80	53, 160	43, 450	38, 734
	101	640	634	634	53. 90	45. 70	41. 00	34, 496	28, 974	25, 994
	101	1,017	1,007	1,050	58. 20	51. 00	42. 80	59, 189	51, 357	44, 940
Michigan Wisconsin. Minnesota Iowa Missouri	100 103 103 101 100	798 1,549 1,163 1,350 789	798 1,504 1,129 1,337 789	767 1, 473 1, 085 1, 407 856	59. 70 59. 90 55. 00 60. 50 54. 00	45. 00 47. 70 45. 00 50. 30 45. 30	39. 50 36. 60 33. 00 36. 00 34. 80	47, 641 92, 785 63, 965 81, 675 42, 606	35,910 $71,741$ $50,805$ $67,251$ $35,742$	30, 296 53, 912 35, 805 50, 652 29, 789
North Dakota	110	305	277	259	59. 00	47. 00	33. 90	17, 995	13, 019	8, 780
South Dakota	109	419	384	370	61. 00	48. 00	33. 00	25, 559	18, 432	12, 210
Nebraska	101	613	607	614	60. 70	49. 60	35. 00	37, 209	30, 107	21, 490
Kansas	100	698	698	736	57. 50	49. 20	36. 90	40, 135	34, 342	27, 158
Kentucky	98	382	390	410	44. 50	38. 80	32. 70	16, 999	15, 132	13, 407
Tennessee	95	348	366	397	41. 40	33. 10	27. 50	14. 407	12, 115	10, 918
	98	388	396	392	32. 40	27. 00	23. 00	12, 571	10, 692	9, 016
	97	421	434	430	34. 00	27. 70	23. 50	14, 314	12, 022	10, 105
	97	263	271	279	34. 00	29. 00	24. 30	8, 942	7, 859	6, 780
	103	1,065	1,034	1,014	45. 60	39. 90	29. 50	48, 564	41, 257	29, 913
OklahomaArkansasMontanaWyomingColorado	100	484	484	531	50. 30	43. 00	31. 50	24, 345	20, 812	16, 726
	96	376	392	426	37. 50	28. 60	22. 00	14, 100	11, 211	9, 372
	110	104	95	77	70. 50	61. 00	46. 50	7, 332	5, 795	3, 580
	114	41	36	33	74. 50	58. 00	43. 70	3, 054	2, 088	1, 442
	108	186	172	145	63. 00	53. 80	41. 00	11, 718	9, 254	5, 945
New Mexico	110	62	56	51	55. 00	47. 80	38. 80	3, 410	2, 677	1, 979
	108	37	34	29	64. 00	58. 00	43. 00	2, 368	1, 972	1, 247
	103	88	85	76	59. 00	49. 00	34. 00	5, 192	4, 165	2, 584
	108	22	20	17	65. 10	52. 00	44. 00	1, 432	1, 040	748
	110	112	102	86	69. 80	59. 60	41. 40	7, 818	6, 079	3, 560
Washington	107	234	219	186	74. 00	62. 50	41. 80	17,316	13, 688	7, 778
Oregon	105	196	187	173	65. 00	56. 00	39. 60	12,740	10, 472	6, 851
California	101	515	510	467	62. 00	53. 50	38. 40	31,930	27, 285	17, 933
United States.	101. 2	20, 737	20, 497	20,625	53.94	45. 02	35. 29	1, 118, 487	922, 783	727, 802

 $<sup>^1</sup>$  Compared with Jan. 1, 1913.  $^2$  Based on census numbers on Apr. 15 and the Department of Agriculture's estimated farm value per head Jan. 1, 1910.

 $\begin{array}{l} \textbf{Table 14.--} Sheep: \textit{Estimated number of farms, and value, Jan. 1, 1914, with comparison \textbf{s,}} \\ \textit{by States.} \end{array}$ 

	Nu	mber (00	00 omitte	ed).	Value p	er head,	Jan. 1—	Total v	alue, Jan omitted).	. 1 (000
State.	Jan. 1 (es		Jan. 1, 1913	Apr. 15, 1910 (cen-	1914	1913	1910	1914	1913	1910 2
	Per ct.1	Total.	(est.).	sus).						
Maine. New Hampshire Vermont. Massachusetts. Rhode Island	95 92 95 90 100	177 39 111 31 7	186 42 117 34 7	206 44 119 33 7	\$4.30 4.40 4.80 5.30 5.40	\$4. 20 4. 90 4. 60 4. 80 5. 10	\$3.70 3.70 4.00 4.20 4.20	\$761 172 533 164 38	\$781 206 538 163 36	\$762 163 476 139 29
Connecticut. New York. New Jersey. Pennsylvania. Delaware.	97 100 99 97 100	20 875 31 839 8	21 875 31 865 8	22 930 31 883 8	5. 40 5. 40 5. 60 4. 90 5. 10	5. 20 5. 00 5. 30 5. 00 4. 70	4.70 5.00 5.20 4.80 4.60	108 4,725 174 4,111 41	109 4,375 164 4,325 38	103 4,650 161 4,238 37
Maryland Virginia. West Virginia North Carolina South Carolina	99 98 96 98 98	223 735 788 177 33	225 750 821 181 34	237 805 910 214 38	5. 00 4. 50 4. 30 3. 20 2. 60	4. 60 4. 00 4. 30 3. 10 2. 80	4. 70 3. 90 4. 30 2. 60 2. 40	1,115 3,308 3,388 566 86	1,035 3,000 3,530 561 95	1, 114 3, 140 3, 913 556 91
Georgia Florida Ohio Indiana Illinois	98 99 95 94 95	166 118 3, 263 1, 238 984	169 119 3, 435 1, 317 1, 036	188 114 3,909 1,337 1,060	2. 10 1. 90 4. 30 4. 90 5. 00	1. 90 2. 10 4. 10 4. 60 5. 10	2. 20 2. 00 4. 80 5. 20 5. 30	349 224 14, 031 6, 066 4, 920	$\begin{array}{c} 321 \\ 250 \\ 14,084 \\ 6,058 \\ 5,284 \end{array}$	414 228 18, 763 6, 952 5, 618
Michigan Wisconsin Minnesota Iowa Missouri		2,118 789 570 1,249 1,568	2, 139 822 570 1, 249 1, 650	2,306 930 638 1,146 1,811	4. 60 4. 70 4. 40 5. 30 4. 20	4. 30 4. 50 4. 40 5. 10 4. 20	4. 70 4. 50 4. 00 5. 30 4. 40	9,743 3,708 2,508 6,620 6,586	9, 198 3, 699 2, 508 6, 370 6, 930	10, 838 4, 185 2, 552 6, 074 7, 968
North Dakota South Dakota Nebraska Kansas Kentucky	98 100	278 617 374 316 1,267	293 593 382 316 1,320	293 611 294 272 1,363	4.20 4.00 4.50 4.50 4.20	3.90 4.10 4.40 4.60 4.00	4.00 4.00 4.40 4.70 4.00	1,168 2,468 1,683 1,422 5,321	1,143 2,431 1,681 1,454 5,280	1,172 2,444 1,294 1,278 5,452
Tennessee	94 97	688 124 202 180 2,052	724 132 208 171 2,073	795 143 195 178 1,809	3.40 2.40 2.30 2.20 2.90	3.10 2.10 2.20 2.00 2.90	3.40 2.00 1.90 1.90 2.90	2,339 298 465 396 5,951	2,244 277 458 342 6,012	2,703 286 370 338 5,246
Oklahoma	95 84 100	75 124 4,293 4,472 1,668	71 130 5,111 4,472 1,737	62 144 5,381 5,397 1,426	4.00 2.60 3.70 4.10 3.70	3.60 2.40 3.70 4.10 3.60	3.30 2.30 4.20 4.40 3.80	300 322 15,884 18,335 6,172	256 312 18,911 18,335 6,253	205 331 22,600 23,747 5,419
New Mexico	102 99 102	3,036 1,601 1,970 1,517 2,981	3,300 1,570 1,990 1,487 2,951	3,347 1,227 1,827 1,155 3,011	3. 00 3. 60 3. 90 4. 50 4. 20	3.10 3.70 4.10 4.00 4.00	2.90 3.70 4.10 3.70 4.70	9,108 5,764 7,683 6,826 12,520	10,230 5,809 8,159 5,948 11,804	9,706 4,540 7,491 4,274 14,152
WashingtonOregonCalifornia	. 101	506 2,670 2,551	501 2,644 2,603	476 2,699 2,417	4.40 3.90 3.80	4. 20 3. 80 3. 70	3.90 3.70 3.30	2,226 10,413 9,694	2, 104 10, 047 9, 631	1,856 9,986 7,976
United States	96.6	49,719	51,482	52,448	4.04	3.94	4.12	200,803	202,779	216,030

Compared with Jan. 1, 1913.
 Based on census numbers on Apr. 15 and the Department of Agriculture's estimated farm value per head Jan. 1, 1910.

Table 15.—Swine: Estimated number on farms, and value, Jan. 1, 1914, with comparisons, by States.

	Nu	mber (0	00 omitte	ed).	Value p	er head,	Jan. 1—	Total v	alue, Jan omitted)	. 1 (000
State.		l, 1914 t.).	Jan. 1, 1913	Apr 15, 1910	1914	1913	1910	1914	1913	1910 2
	Per ct.1	Total.	(est.).	(cen- sus)						1010
Maine. New Hampshire. Vermont. Massachusetts Rhode Island.	96	97	101	87	\$15.80	\$12.90	\$11.50	\$1,533	\$1,303	\$1,000
	98	51	52	45	14.80	12.70	11.50	755	660	518
	99	106	107	95	14.10	12.20	10.00	1,495	1,305	950
	92	106	115	103	14.50	13.00	11.50	1,537	1,495	1,184
	100	14	14	14	15.20	14.50	12.50	213	203	175
Connecticut	99	57	58	52	16.30	14. 00	12. 50	929	812	650
New York	99	753	761	666	14.50	12. 60	11. 50	10, 918	9,589	7,659
New Jersey	99	158	160	147	13.60	13. 00	12. 00	2, 149	2,080	1,764
Pennsylvania	100	1,130	1,130	978	13.80	12. 50	9. 50	15, 594	14,125	9,291
Delaware	100	58	58	49	10.30	11. 20	8. 70	597	650	426
Maryland	99	332	335	302	10. 50	9. 80	8. 90	3,486	3, 283	2,688
Virginia.	104	869	836	798	8. 30	7. 00	6. 50	7,213	5, 852	5,187
West Virginia.	103	367	356	328	10. 10	9. 00	7. 70	3,707	3, 204	2,526
North Carolina.	102	1,362	1,335	1,228	9. 00	7. 70	7. 20	12,258	10, 280	8,842
South Carolina.	102	780	765	<del>6</del> 65	9. 10	8. 50	7. 20	7,098	6, 502	4,788
Georgia	103	1,945	1,888	1,784	8. 20	7. 10	7. 00	15,949	13, 405	12,488
Florida.	103	904	878	810	6. 00	5. 90	4. 80	5,424	5, 180	3,888
Ohio	102	3,467	3,399	3,106	11. 30	10. 80	10. 70	39,177	36, 709	33,234
Indiana	107	3,969	3,709	3,614	10. 30	9. 80	10. 00	40,881	36, 348	36,140
Illinois	101	4,358	4,315	4,686	10. 80	10. 50	10. 90	47,066	45, 308	51,077
Michigan	100	1,313	1,313	1,246	12.30	10. 80	10.50	16,150	14, 180	13,083
	101	2,050	2,030	1,809	13.00	11. 60	11.80	26,650	23, 548	21,346
	84	1,430	1,702	1,520	14.00	12. 70	11.50	20,020	21, 615	17,480
	80	6,976	8,720	7,546	12.60	12. 00	11.30	87,898	104, 640	85,270
	104	4,250	4,087	4,438	8.50	8. 50	7.90	36,125	34, 740	35,060
North Dakota	117	428	366	332	13. 20	13. 70	11. 00	5, 650	5,014	3, 652
South Dakota	88	1,039	1, 181	1,010	11. 30	11. 00	11. 10	11, 741	12,991	11, 211
Nebraska	85	3,228	3, 798	3,436	11. 80	11. 40	11. 00	38, 090	43,297	37, 796
Kansas	90	2,350	2, 611	3,000	10. 00	10. 40	10. 00	23, 500	27,154	30, <b>00</b> 0
Kentucky	92	1,507	1, 638	1,492	7. 70	7. 10	6. 80	11, 604	11,630	10, 146
Tennessee. Alabama Mississippi Louisiana Texas	93	1,390	1, 495	1,388	8.50	7. 40	6. 50	11, 815	11,063	9, 022
	102	1,485	1, 456	1,267	8.50	6. 80	6. 00	12, 622	9,901	7, 602
	99	1,467	1, 482	1,292	8.10	6. 90	5. 50	11, 883	10,226	7, 106
	99	1,398	1, 412	1,328	8.00	7. 00	5. 50	11, 184	9,884	7, 304
	105	2,618	2, 493	2,336	8.60	8. 40	6. 60	22, 515	20,941	15, 418
Oklahoma	102	1,352	1,325	1, 839	8. 40	8. 90	7. 70	11, 357	11, 792	14, 160
Arkansas	98	1,498	1,529	1, 519	7. 40	6. 70	4. 80	11, 085	10, 244	7, 291
Montana	120	184	153	99	11. 90	11. 90	10/10	2, 190	1, 821	1, 000
Wyoming	125	51	41	34	12. 40	11. 00	8. 50	632	451	289
Colorado	100	205	205	179	10. 50	11. 00	9. 50	2, 152	2, 255	1, 700
New Mexico	108	56	52	46	10. 10	9. 60	8.50	566	499	391
Arizona	105	24	23	17	9. 60	11. 50	9.50	230	264	162
Utah	105	85	81	64	10. 90	11. 00	9.00	926	891	576
Nevada	104	33	32	23	12. 60	11. 00	9.00	416	352	207
Idaho	108	252	233	178	10. 70	10. 30	8.70	2,696	2,400	1,549
Washington	110	284	258	206	12.70	11.30	9.40	3,607	2, 915	1,936
Oregon	112	300	268	218	11.00	9.50	8.20	3,300	2, 546	1,788
California	97	797	822	767	10.50	9.20	8.20	8,368	7, 562	6,289
United States.	96. 3	58,933	61, 178	58, 186	10.40	9.86	9.17	612, 951	603, 109	533, 309

 $<sup>^1</sup>$  Compared with Jan. 1, 1913.  $^2$  Based on census numbers on Apr. 15 and the Department of Agriculture's estimated farm value per head Jan. 1, 1910.

•	N	umber ((	000 omitt	æd).	Value 1	per head,	Jan. 1.	Total	value, Jan. omitted).	1 (000
State.	Jan. (e	1, 1914 st.).	Jan. 1, 1913	Apr. 15, 1910	1914	1913	1910	1914	1913	1910 2
	Per ct.1	Total.	(est.).	(cen- sus).	1914	1913	1910	1914	1913	1910 -
Maine	111	111	110	108	\$150.00	\$139. 00	\$125.00	\$16,650	\$15, 290	\$13, 500
	102	47	46	46	137.00	123. 00	106.00	6,439	5, 658	4, 876
	105	88	84	81	129.00	127. 00	106.00	11,352	10, 668	8, 586
	101	65	64	64	161.00	146. 00	128.00	10,465	9, 344	8, 192
	103	10	10	9	156.00	144. 00	129.00	1,560	1, 440	1, 161
Connecticut	100	47	47	46	153. 00	141.00	126. 00	7, 191	6, 627	5, 796
New York	101	615	609	591	145. 00	137.00	125. 00	89, 175	83, 433	73, 875
New Jersey	101	91	90	89	157. 00	147.00	134. 00	14, 287	13, 230	11, 926
Pennsylvania	101	584	578	550	139. 00	133.00	132. 00	81, 176	76, 874	72, 600
Delà ware	102	35	34	33	106. 00	102.00	106. 00	3, 710	3, 468	3, 498
Maryland	101	165	163	156	119. 00	116.00	108. 00	19, 635	18, 908	16, 848
Virginia	103	350	340	330	114. 00	106.00	107. 00	39, 900	36, 040	35, 310
West Virginia	103	190	184	180	122. 00	116.00	112. 00	23, 180	21, 344	20, 160
North Carolina	102	180	176	166	139. 00	128.00	121. 00	25, 020	22, 528	20, 086
South Carolina	102	85	83	80	144. 00	140.00	127. 00	12, 240	11, 620	10, 160
Georgia	102	$   \begin{array}{r}     128 \\     55 \\     901 \\     854 \\     1,497   \end{array} $	125	120	131. 00	123.00	125. 00	16, 768	15, 375	15,000
Florida	104		53	46	122. 00	118.00	109. 00	6, 710	6, 254	5,014
Ohio	101		892	910	132. 00	130.00	129. 00	118, 932	115, 960	117,390
Indiana	101		846	814	116. 00	117.00	122. 00	99, 064	98, 982	99,308
Illinois	101		1,482	1,453	113. 00	120.00	124. 00	169, 161	177, 840	180,172
Michigan	102	653	640	610	139. 00	137.00	126.00	90, 767	87, 680	76, 860
	102	678	665	615	136. 00	131.00	121.00	92, 208	87, 115	74, 415
	103	847	822	753	125. 00	123.00	111.00	105, 875	101, 106	83, 583
	101	1,584	1,568	1,492	118. 00	120.00	120.00	186, 912	188, 160	179, 040
	101	1,095	1,084	1,073	98. 00	101.00	103.00	107, 310	109, 484	110, 519
North Dakota	105	748	712	651	112.00	124.00	114.00	83,776	88, 288	74, 214
South Dakota	104	730	702	669	96.00	105.00	105.00	70,080	73, 710	70, 245
Nebraska	102	1,048	1,027	1,008	94.00	101.00	108.00	98,512	103, 727	108, 864
Kansas	101	1,110	1,099	1,147	93.00	103.00	107.00	103,230	113, 197	122, 729
Kentucky	100	443	443	443	103.00	104.00	105.00	45,629	46, 072	46, 515
Tennessee	99	346	350	350	116. 00	115.00	112.00	40, 136	40, 250	39, 200
	102	149	146	136	113. 00	106.00	95.00	16, 837	15, 476	12, 920
	102	241	236	216	95. 00	92.00	85.00	22, 895	21, 712	18, 360
	102	191	187	181	85. 00	87.00	79.00	16, 235	16, 269	14, 299
	103	1,216	1,181	1,170	80. 00	82.00	73.00	97, 280	96, 842	85, 410
OklahomaArkansasMontanaWyomingColorado	101 101 105 109 105	766 273 372 171 340	758 270 354 157 324	255 316 156 294	85.00 93.00 102.00 79.00 83.00	84.00 89.00 93.00 76.00 87.00	81.00 82.00 80.00 83.00 85.00	65, 110 25, 389 37, 944 13, 509 28, 220	63, 672 24, 030 32, 922 11, 932 28, 188	60, 183 20, 910 25, 280 12, 948 24, 990
New Mexico Arizona Utah Nevada Idaho	103	197	191	179	55.00	58.00	47. 00	10, 835	11,078	8, 413
	104	112	108	100	73.00	78.00	62. 00	8, 176	8,424	6, 200
	104	140	135	116	91.00	93.00	85. 00	12, 740	12,555	9, 860
	102	76	75	68	78.00	87.00	78. 00	5, 928	6,525	5, 304
	105	234	223	198	96.00	100.00	102. 00	22, 464	22,300	20, 196
Washington	102	305	299	281	106.00	110.00	108.00	32,330	32, 890	30, 348
Oregon	103	301	292	272	96.00	99.00	103.00	28,896	28, 908	28, 016
California	99	498	503	469	100.00	109.00	105.00	49,800	54, 827	49, 245
United States.	101.9	20,962	20, 567	19, 833	109.32	110.77	108.03	2, 291, 638	2, 278, 222	2, 142, 524

Compared with Jan. 1, 1913.
 Based on Census numbers on Apr. 15 and the Department of Agriculture's estimated farm value per head Jan 1, 1910.

Table 17.—Mules: Estimated number on farms and value, Jan. 1, 1914, with comparisons, by States.

	Nu	mber (00	00 omitte	ed).	Value	per head	Jan. 1.		al value, Ja 00 omitted	
States.	Jan. 1 (es	, 1914 t.).	Jan. 1, 1913	Apr. 15, 1910 (cen-	1914	1913	1910	1914	1913	1910 2
	Per ct.1	Total.	(est.).	sus).						
Maine New Hampshire										
Maine										
Connecticut New York New Jersey Pennsylvania Delaware	102 102 102 102 103	4 4 45 6	4 4 44 6	4 4 44 6	\$154.00 177.00 148.00 126.00	\$157.00 169.00 149.00 125.00	\$132.00 155.00 145.00 125.00	\$616 708 6,660 756	\$628 676 6,556 750	\$528 620 6,380 750
Maryland	103 102 100 103 102	24 61 12 192 171	23 60 12 186 168	23 60 12 175 156	143.00 136.00 131.00 160.00 167.00	142.00 128.00 126.00 148.00 171.00	130. 00 130. 00 120. 00 137. 00 158. 00	3, 432 8, 296 1, 572 30, 720 28, 557	3, 266 7, 680 1, 512 27, 528 28, 728	2, 990 7, 800 1, 440 23, 975 24, 648
Georgia	103 104 100 102 99	319 27 24 86 148	310 26 24 84 149	295 23 23 82 148	161. 00 168. 00 132. 00 121. 00 121. 00	151. 00 152. 00 131. 00 122. 00 131. 00	157. 00 155. 00 125. 00 126. 00 131. 00	51, 359 4, 536 3, 168 10, 406 17, 908	46, 810 3, 952 3, 144 10, 248 19, 519	46, 315 3, 565 2, 875 10, 332 19, 388
Michigan. Wisconsin. Minnesota. Iowa. Missouri.	102 100 102 102 100	4 3 6 57 326	4 3 6 56 326	4 3 6 56 343	133.00 135.00 134.00 123.00 112.00	139. 00 131. 00 128. 00 124. 00 117. 00	122.00 115.00 114.00 123.00 119.00	532 405 804 7,011 36,512	556 393 768 6,944 38,142	488 345 684 6,888 40,817
North Dakota South Dakota Nebraska. Kansas. Kentucky.	103 102 100 100 100	8 14 84 222 229	8 14 84 222 229	8 12 83 208 225	130.00 110.00 105.00 105.00 118.00	141.00 118.00 112.00 114.00 120.00	130.00 121.00 119.00 116.00 118.00	$\begin{array}{c} 1,040 \\ 1,540 \\ 8,820 \\ 23,310 \\ 27,022 \end{array}$	1,128 1,652 9,408 25,308 27,480	1,040 1,452 9,877 24,128 26,550
Tennessee. Alabama Mississippi Louisiana Texas.	98 103 102 99 104	270 278 286 132 753	276 270 280 133 724	276 247 256 132 676	127 00 135.00 115.00 128.00 109.00	129.00 131.00 114.00 127.00 110.00	123.00 122.00 113.00 116.00 99.00	34,290 37,530 32,890 16,896 82,077	35,604 $35,370$ $31,920$ $16,891$ $79,640$	33,948 30,134 28,928 15,312 66,924
Oklahoma Arkansas Montana Wyoming Colorado	101 101 105	269 235 4 2 17	269 233 4 2 17	257 222 4 2 15	104.00 114.00 106.00 113.00 101.00	107.00 115.00 109.00 109.00 104.00	105.00 109.00 102.00 106.00 105.00	27, 976 26, 790 424 226 1, 717	28,783 26,795 436 218 1,768	26, 985 24, 198 408 212 1, 575
New Mexico. Arizona. Utah. Nevada. Idaho.	100 111 100 110 104	15 6 2 3 4	15 5 2 3 4	15 4 2 3 4	92.00 144.00 82.00 79.00 103.00	90.00 119.00 92.00 95.00 108.00	79.00 108.00 80.00 79.00 116.00	1,380 864 164 237 412	1,350 595 184 285 432	1, 185 432 160 237 464
Washington Oregon California	103 104 100	14 10 73	14 10 73	12 10 70	116.00 107.00 120.00	117.00 107.00 130.00	121.00 108.00 122.00	1,624 1,070 8,760	1,638 1,070 9,490	1, 452 1, 080 8, 540
United States	101.4	4,449	4,386	4, 210	123.85	124.31	120.20	551,017	545, 245	506,049

 $<sup>^1</sup>$  Compared with Jan. 1, 1913.  $^2$  Based on Census numbers on Apr. 15 and the Department of Agriculture's estimated farm value per head Jan. 1, 1910.

Table 18.—Stocks of potatoes, Jan. 1, 1914.

	Total produc-	Stock in hands,	growers' Jan. 1.	Stock in hands,		Total stock,	Pric busi	e per nel—
State and year.	tion, bushels (000 omitted).	Per cent of crops.	Bushels (000 omitted).	Per cent of crops.	Bushels (000 omitted).	bushels (000 omitted).	Dec. 1.	Mar. 1.
New England: 1913-14.	39, 102	46	17,874	11	4,388	22, 262 19, 575 16, 700	Cents. 61 59	Cents.
1913–14 1912–13 1911–12 1910–11 1909–10	35, 592 30, 925 41, 870 41, 246	48 48 52 50	17, 874 17, 084 14, 844 21, 772 20, 623	7 6 12 7	2,491 1,856 5,024 2,887	16, 700 26, 796 23, 510	82 47 53	112 . 43 . 45
New York: 1913-14. 1912-13. 1911-12.	26, 640 38, 160 27, 750	55 47 35	14,630 17,935 9,712	4 4 5	1,064 1,526 1,388	15, 694 19, 461 11, 100	80 58 90	63 109
1910-11. 1909-10. Pennsylvania:	40, 290 48, 598 23, 320	48 43 38	19,339 20,897 8,854	6 7 11	2, 417 3, 402 2, 563	21, 756 24, 299 11, 417	48 50 80	40 50
1912-13. 1911-12. 1910-11. 1909-10.	28, 885 15, 120 24, 200 21, 741	33 23 33 30	9,532 3,478 7,986 6,522	8 5 10 8	2,311 756 2,420 1,739	11,843 4,234 10,406 8,261	57 93 52 65	62 115 52 60
New Jersey: 1913-14 1912-13 1911-12 1910-11 1909-10	8,930 9,936 6,132 9,135 8,057	6 13 6 13 20	534 1, 292 368 1, 188 1, 611	2 3 4 5 6	178 298 245 457 483	712 1,590 613 1,645 2,094	82 66 105 65 82	71 114 60 78
Ohio: 1913-14 1912-13 1911-12 1910-11 1909-10		26 31 25 36 32	2,652 6,459 3,088 6,199 6,503	10 12 7 14 12	1,020 2,500 864 2,411 2,439	3,672 8,959 3,952 8,610 8,942	85 53 84 51 56	58 114 49 53
1913-14 1912-13 1911-12 1910-11	3,975 9,918 5,162 8,148 8,906	30 31 22 34 35	1,200 3,075 1,136 2,770 3,117	16 16 10 16 16	640 1,587 516 1,304 1,425	1,840 4,662 1,652 4,074 4,542	84 50 87 50 50 52	54 116 49 53
1909-10 Illinois: 1913-14 1912-13 1911-12 1910-11 1909-10	5,750 13,837	21 17 20 28 30	1,218 2,352 1,380 3,066 3,650	5 11 10 12 11	290 1,522 1,035 1,533 1,825	1,508 3,874 2,415 4,599 5,475	89 60 90 59 61	62 113 62 60
Michigan: 1913-14 1912-13 1911-12 1910-11 1909-10	33,600 36,750 31,020 36,750 38,244	49 51 41 43 51	16, 964 18, 742 12, 718 15, 802 19, 604	12 11 10 12 11	4,032 4,042 3,102 4,410 4,207	20, 996 22, 784 15, 820 20, 212 23, 811	55 41 71 31 35	38 89 30 29
Wisconsin: 1913-14 1912-13 1911-12 1910-11 1909-10	32, 155	53 51 37 48 45	17,066 14,809 12,018 12,768 14,386	10 11 11 11 11 10	3, 220 3, 841 3, 573 2, 926 3, 197	20, 286 18, 650 15, 591 15, 694 17, 583	54 34 62 38 38	32 85 35 32
Minnesota: 1913-14 1912-13 1911-12 1910-11 1909-10	1	37 41 32 34 45	11, 174 13, 561 8, 280 4, 563 12, 061	13 15 12 15 10	3, 926 5, 161 3, 105 2, 013 2, 680	15, 100 18, 722 11, 385 6, 576 14, 741	52 28 58 64 35	28 84 59 34
1913-14 1912-13 1911-12 1910-11 1909-10	7, 200 18, 966 12, 876	20 31 15 20 31	1,440 5,879 1,931 2,477 4,560	2 15 10 12 15	144 2, 845 1, 288 1, 486 2, 206	4,320 8,724 3,219 3,963 6,766	82 46 73 60 55	5( 11( 6) 56
Nebraska: 1913–14. 1912–13. 1911–12. 1910–11. 1909–10.	5, 664 9, 440 6, 032 6, 900	27 32 25 30 33	1,539 3,021 1,508 2,070 2,679	8 8 10 12 15	456 755 603 828 1, 218	2, 095 3, 776 2, 111 2, 898	78 51 92 84 60	52 12 81 63

Table 18.—Stocks of potatoes, Jan. 1, 1914—Continued.

	Total produc- tion,		growers' Jan. 1.		dealers' Jan. 1.	Total stock.	Price per bushel—	
State and year.	bushels (000 omitted).	Per cent of crops.	Bushels (000 omitted).	Per cent of crops.			Dec. 1.	Mar. 1.
Kansas:  1913-14  1912-13  1911-12  1910-11  1909-10  Colorado:  1913-14  1912-13  1911-12  1910-11  1909-10  Total above:  1913-14  1912-13  1911-12  1910-11	5, 647 9, 200 8, 075 3, 150 8, 600 11, 781 238, 946 304, 126 217, 532	10 19 11 14 20 55 60 45 50 48 42.1 39.8 33.1	290 1, 091 1, 091 194 654 1, 129 5, 060 4, 845 1, 418 4, 300 5, 655 100, 495 119, 678 72, 072	8 14 7 8 13 7 6 8 10 8 9.5 9.8 8.6	232 804 123 374 734 614 484 252 860 942 22,797 167,149 18,706	522 1, 895 317 1,028 1, 863 5, 704 5, 329 1, 670 5, 160 6, 597 123, 292 149, 845 90, 778	Cents. 91 73 106 90 79 65 41 99 55 57 66. 2 48. 6 77. 6	76 132 92 85 100 61 59 47.7 101.4
1910–11 1909–10	261,141 298,308	$\frac{40.2}{41.2}$	104, 954 122, 997	10.9 9.9	28, 457 29, 384	133, 411 142, 381	49. 5 50. 0	46. 9 47. 3

Table 19.—Wheat crop of countries named, 1911-1913.

Country		Area.			Production.	
Country.	1911	1912	1913	1911	1912	1913
NORTH AMERICA. United States	A cres. 49,543,000	Acres. 45,814,000	Acres. 50,184,000	Bushels. 621,338,000	Bu?hels. 730,267,000	Bushels. 763, 380, 000
Canada: New Brunswick Ontario Manitoba Saskatchewan Alberta Other	13,000 941,000 2,980,000 4,705,000 1,617,000 121,000	(1)	(1) (1) 2,804,000 5,720,000 1,512,000 979,000	270,000 19,252,000 60,275,000 97,665,000 36,143,000 2,313,000	(1)	(1) (1) 53,331,000 121,559,000 34,372,000 22,455,000
Total Canada	10,377,000	10,997,000	11,015,000	215,918,000	224, 159, 000	231,717,000
Mexico	(1)	(1)	(1)	12,000,000	12,000,000	10,000,000
Total	• • • • • • • • • • • • • • • • • • • •			849, 256, 000	966, 426, 000	1,005,097,000
SOUTH AMERICA.						
Argentina. Chile. Uruguay	15, 452, 000 968, 060 637, 000	$\substack{17,042,000\\1,093,000\\799,000}$	17,096,000 (1) (1)	$\substack{145,981,000\\18,184,000\\6,009,060}$	166, 190, 000 22, 468, 000 8, 757, 000	198, 414, 000 21, 000, 000 9, 000, 000
Total				170, 174, 000	197, 415, 000	228, 414, 000
EUROPE.						
Austria-Hungary: Austria Hungary proper Croatia-Slavonia Bosnia-Herzego- vina	3,003,000 8,354,000 808,000 218,000	3,114,000 8,748,000 833,000 247,000	2,998,000 7,813,000 837,000	58, 865, 000 174, 889, 000 15, 188, 000 2, 941, 000	69,712,000 173,328,000 11,314,000 2,993,000	60, 123, 000 149, 774, 000 16, 899, 000 2, 572, 000
Total Austria- Hungary	12,383,000	12,942,000		251,883,000	257, 347, 000	229, 368, 000

¹ No data.

Table 19.—Wheat crop of countries named, 1911-1913—Continued.

~ .		Area.			Production.	
Country.	1911	1912	1913	1911	1912	1913
EUROPE—continued. Belgium	Acres. 399,000	Acres.	Acres.	Bushels, 15,745,000	Bushels. 15,348,000	Bushels. 15,042,000
Bulgaria. Denmark Finland.	2, 764, 000 2 100, 000 (1) 15, 897, 000	(1) (1) (1) (1) 16, 238, 000	(1) (1) (1) (1) 16,169,000	15, 745, 000 48, 295, 000 4, 466, 000 125, 000 315, 126, 000	45,000,000 3,604,000 130,000 336,284,000	45,000,000 4,463,000 130,000 321,571,000
France Germany Greece Italy	4,878,000 (1) 11,741,000	4,759,000 (1) 11,751,000	4,878,000 (1) 11,842,000	149,411,000 8,000,000 192,395,000	$ \begin{array}{c c} 160, 224, 000 \\ 7,000,000 \\ 165, 720,000 \end{array} $	171,075,000 7,000,000 214,405,000
Montenegro Netherlands Norway Portugal Roumania	142,000 212,000 1,211,000 4,769,000	(1) 143,000 (1) (1) 5,114,000	140,000 (1) (1) (1) 4,011,000	200,000 5,511,000 271,000 11,850,000 93,724,000	200,000 5,604,000 332,000 7,500,000 88,924,000	200,000 4,773,000 300,000 5,500,000 83,236,000
Russia: Russia proper Poland Northern Caucasia	52, 557, 000 1, 255, 000 9, 908, 000			346, 372, 000 24, 129, 000 76, 537, 000		
Total Russia (European)	63, 720, 000	371,302,000	<sup>3</sup> 74, 512, 000	447, 038, 000	3 805, 255, 000	<b>8</b> 962, 587, <b>000</b>
Servia Spain Sweden Switzerland Turkey (European)	955,000 9,706,000 251,000 (1) (1)	956,000 9,625,000 (1) (1) (1)	9, 414, 000 (1) (1) (1) (1)	15,312,000 148,495,000 7,945,000 3,524,000 20,000,000	16, 351, 000 109, 783, 000 7, 832, 000 3, 178, 000 18, 000, 000	11,090,000 110,097,009 7,800,000 3,500,000 18,000,000
United Kingdom: England Wales Scotland Ireland	1,804,000 38,000 64,000 45,000	1,822,000 41,000 •62,000 45,000	1,664,000 38,000 60,000 34,000	60,729,000 1,118,000 2,786,000 1,656,000	54,004,000 1,123,000 2,471,000 1,564,000	53,731,000 1,075,000 2,335,000 1,295,000
Total United Kingdom	1,951,000	1,970,000	1,796,000	66, 289, 000	59, 162, 000	58, 436, 000
Total				1,805,605,000	2,112,778,000	2, 273, 483, 000
ASIA. British India, includ-						
ing such native states as report	30, 565, 000 (1)	31, 141, 000 (1)	29, 569, 000 (1)	375, 629, 000 2, 394, 000	370, 515, 000 2, 071, 000	358, 388, 000 2, 100, 000
Japanese Empire: Japan Formosa	1, 223, 000 13, 400	1, 216, 000 (1)	1, 226, 000 (1)	25, 645, 000 138, 000	26, 514, 000 140, 000	27, 000, 000 140, 000
Total Japanese Empire				25, 783, 000	26, 654, 000	27, 140, 000
Persia	(1)	(1)	(1)	16,000,000	16,000,000	16,000,000
Russia: Central Asia (4 governments of). Siberia (4 govern-	3,616,000			52, 557, 000	••••	
ments of) Transeaucasia (1 government of)	5, 888, 000 11, 000			1, 255, 000 9, 908, 000		
Total Russia (Asiatic)	9, 515, 000	(4)	(4)	63, 720, 000	(4)	(4)
Turkey (Asia Minor only)	(1)	(1)	(1)	35,000,000	35,000,000	35,000,000
Total				518, 526, 000	450, 240, 000	438, 628, 000

<sup>&</sup>lt;sup>1</sup> No data. <sup>2</sup> Census of 1907.

Includes 10 governments of Asiatic Russia.
 Included under total Russia (European).

Country.	Area.			Production.		
	1911	1912	1913	1911	1912	1913
AFRICA. Algeria. Egypt. Tunis Union of South Africa. Total	Acres. 3,554,000 1,285,000 1,401,000	A cres. 3, 614,000 1, 332,000 1, 263,000 (1)	Acres. 3,448,000 1,331,000 1,235,000 (1)	Bushels, 35,874,000 38,046,000 8,635,000 6,034,000	Bushels. 27, 172, 000 30, 903, 000 4, 225, 000 2 6, 034, 000 68, 334, 000	Bushels. 36, 848, 000 30, 900, 000 5, 500, 000 2 6, 034, 000
Australia: Queensland New South Wales. Victoria South Australia. Western Australia. Tasmania Total Australia.	107,000 2,129,000 2,398,000 2,105,000 582,000 52,000	43,000 2,381,000 2,164,000 2,191,000 612,000 37,000	125,000 2,231,000 2,085,000 2,085,000 793,000 25,000	1,055,000 28,793,000 35,910,000 25,112,000 6,083,000 1,156,000	294,000 25,879,000 21,550,000 20,994,000 4,496,000 681,000	2, 038, 000 33, 499, 000 27, 050, 000 22, 174, 000 9, 457, 000 650, 000
New Zealand	322,000	215, 000	190,000	8,535,000	8,000,000	5, 886, 000
Total AustralasiaGrand total	7,695,000	7,643,000	7,529,000	106,644,000	81,894,000	100, 754, 000

Table 19.—Wheat crop of countries named, 1911-1913—Continued.

Note.—The above figures for European and Asiatic Russia include 72 governments only; the area and production in the whole Empire in 1911 were 80,086,000 acres and 563,485,000 bushels.

## New wheat crop Southern Hemisphere.

A cablegram from the International Institute of Agriculture, Rome, Italy, received by the United States Department of Agriculture February 3, contains the following statement of estimated wheat production of the crop of 1913–1914, harvested principally in December and January, of the two principal producing countries of the Southern Hemisphere.

Preliminary estimate of production of all wheat in Australia, 113,344,000 bushels.

Preliminary estimate of total production of all wheat in Argentina and Australia, 244,533,000 bushels.



<sup>1</sup> No date.

<sup>&</sup>lt;sup>2</sup> Census figures for the year 1911.